

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2025
OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ____ to ____
Commission file number 001-40653

Duolingo, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

45-3055872

(I.R.S. Employer Identification No.)

5900 Penn Avenue

Pittsburgh, Pennsylvania 15206

(412) 567-6602

(Address, including Zip Code, and Telephone Number, including
Area Code, of Registrant's Principal Executive Offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, \$0.0001 per share	DUOL	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports); and (2) has been subject to such filing requirements for the past 90 days.
Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

As of April 30, 2025, 39,260,633 shares of the registrant's Class A common stock were outstanding, and 6,193,612 shares of the registrant's Class B common stock were outstanding.

Table of Contents	Page
<u>Special Note Regarding Forward-Looking Statements</u>	<u>2</u>
<u>Special Note Regarding Key Operating Metrics</u>	<u>4</u>
<u>Part I Financial Information</u>	<u>5</u>
<u>Item 1. Financial Statements (Unaudited)</u>	<u>5</u>
<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>21</u>
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	<u>33</u>
<u>Item 4. Controls and Procedures</u>	<u>34</u>
<u>Part II Other Information</u>	<u>35</u>
<u>Item 1. Legal Proceedings</u>	<u>35</u>
<u>Item 1A. Risk Factors</u>	<u>35</u>
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	<u>35</u>
<u>Item 3. Defaults Upon Senior Securities</u>	<u>35</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>35</u>
<u>Item 5. Other Information</u>	<u>35</u>
<u>Item 6. Exhibits</u>	<u>36</u>
<u>Signatures</u>	<u>37</u>

Special Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act of 1933, as amended (the “Securities Act”) and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). All statements other than statements of historical facts contained in this Quarterly Report on Form 10-Q, including without limitation, statements regarding our business model and strategic plans, including the introduction of new products, and our implementation thereof; statements regarding our expectations, beliefs, plans, objectives, prospects, assumptions, future events or expected performance, including our ability to compete in our industry; the sufficiency of our cash, cash equivalents and investments; and the plans and objectives of management for future operations and capital expenditures are forward-looking statements.

Without limiting the generality of the foregoing, you can identify forward-looking statements because they contain words such as “may,” “will,” “shall,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential,” “goal,” “objective,” “seeks,” or “continue” or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans, or intentions. Such forward-looking statements are neither promises nor guarantees, but involve a number of known and unknown risks, uncertainties and assumptions that may cause our actual results, performance or achievements to differ materially from those expressed or implied in the forward-looking statements due to various factors, including, but not limited to:

- our ability to retain and grow our users and sustain their engagement with our products;
- competition in the online language learning industry;
- our ability to maintain profitability;
- our ability to manage our growth and operate at such scale;
- the success of our investments;
- our ability to accurately predict our quarterly operating results and other operating metrics;
- our ability to accurately measure our user metrics and other operating metrics;
- our reliance on third-party platforms to store and distribute our products and collect revenue;
- the success of our development, implementation and use of artificial intelligence and machine learning technologies;
- our reliance on third-party hosting and cloud computing providers;
- our ability to compete for advertisements;
- acceptance by educational organizations of technology-based education;
- changes in our business and macroeconomic conditions;
- those identified in Part I, Item 2. “Management’s Discussion and Analysis of Financial Condition and Results of Operations in this Quarterly Report on Form 10-Q; and
- those identified in Part I, Item 1A. “Risk Factors” and Part II, Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2024 (the “Annual Report on Form 10-K”).

We caution you that the foregoing list does not contain all of the forward-looking statements made in this Quarterly Report on Form 10-Q.

You should not rely upon forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this Quarterly Report on Form 10-Q primarily on our current expectations, estimates, forecasts, and projections about future events and trends that we believe may affect our business, financial condition, results of operations and prospects. These statements are based upon information available to us as of the date of this Quarterly Report on Form 10-Q and, although we believe that we have a reasonable basis for each forward-looking statement contained in this Quarterly Report on Form 10-Q, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. We cannot guarantee that the future results, levels of activity, performance, or events and circumstances reflected in the forward-looking statements will be achieved or occur at all. Moreover, we operate in a very competitive and rapidly changing environment. The results, events, and circumstances reflected in the forward-looking statements may not be achieved or occur, and actual results, events, or circumstances could differ materially from those described in the forward-looking statements. You should not place undue reliance on our forward-looking statements.

The forward-looking statements made in this Quarterly Report on Form 10-Q relate only to events as of the date on which the statements are made. While we may elect to update such forward-looking statements at some point in the future, unless required by applicable law, we disclaim any obligation to do so, even if subsequent events cause our views to change.

You should read this Quarterly Report on Form 10-Q and the documents that we reference in this Quarterly Report on Form 10-Q completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this Quarterly Report on Form 10-Q by these cautionary statements.

Unless the context otherwise requires, all references in this Quarterly Report on Form 10-Q to “Duolingo,” the “Company,” “we,” “our,” “us,” or similar terms refer to Duolingo, Inc. and its subsidiaries.

Special Note Regarding Key Operating Metrics

We manage our business by tracking several operating metrics, including monthly active users (MAUs), daily active users (DAUs), paid subscribers, subscription bookings, and total bookings. We believe each of these operating metrics provides useful information to investors and others. For information concerning these metrics as measured by us, see Part I, Item 2. “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Key Operating Metrics and Non-GAAP Financial Measures.”

While these metrics are based on what we believe to be reasonable estimates of our user base for the applicable period of measurement, there are inherent challenges in measuring how our platform is used. These metrics are determined by using internal data gathered on an analytics platform that we developed and operate and have not been validated by an independent third party. This platform tracks user account and session activity. If we fail to maintain an effective analytics platform, our metrics calculations may be inaccurate.

We believe that these metrics are reasonable estimates of our user base for the applicable period of measurement, and that the methodologies we employ and update from time-to-time to create these metrics are reasonable bases to identify trends in user behavior. Because we update the methodologies we employ to create metrics, our operating metrics may not be comparable to those in prior periods. See “Risk Factors—Our user metrics and other operating metrics are subject to inherent challenges in measurement, and real or perceived inaccuracies in those metrics may negatively affect our reputation and our business” included in the Annual Report on Form 10-K. Other companies, including companies in our industry, may calculate these metrics differently.

Part I Financial Information

Item 1. Financial Statements (Unaudited)

DUOLINGO, INC. AND SUBSIDIARIES
UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS
(Amounts in thousands, except par value amounts)

	March 31, 2025	December 31, 2024
ASSETS		
Current assets		
Cash and cash equivalents	\$ 883,996	\$ 785,791
Short-term investments	115,284	91,854
Accounts receivable	114,183	128,923
Deferred cost of revenues	89,564	80,162
Prepaid expenses and other current assets	16,630	14,858
Total current assets	1,219,657	1,101,588
Operating lease right-of-use assets	46,369	47,495
Intangible assets, net	18,872	19,899
Long-term investments	83,342	98,292
Property and equipment, net	19,161	18,943
Goodwill	10,538	10,538
Restricted cash	2,735	2,735
Deferred tax assets, net	675	675
Other assets	1,797	1,563
Total assets	\$ 1,403,146	\$ 1,301,728
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Deferred revenues	\$ 415,023	\$ 372,884
Accounts payable	2,546	6,381
Income tax payable	6,381	6,591
Accrued expenses and other current liabilities	30,535	36,375
Total current liabilities	454,485	422,231
Long-term obligation under operating leases	54,533	54,656
Deferred tax liabilities, net	302	291
Total liabilities	509,320	477,178
Commitments and contingencies (Note 9)		
Stockholders' equity		
Class A common stock, \$0.0001 par value; 2,000,000 shares authorized as of March 31, 2025 and December 31, 2024; 39,220 and 38,730 issued and outstanding at March 31, 2025 and December 31, 2024, respectively	4	4
Class B common stock, \$0.0001 par value; 30,000 shares authorized as of March 31, 2025 and December 31, 2024; 6,196 and 6,206 issued and outstanding at March 31, 2025 and December 31, 2024, respectively		
Additional paid-in capital	984,534	950,393
Accumulated deficit	(90,712)	(125,847)
Total stockholders' equity	893,826	824,550
Total liabilities and stockholders' equity	\$ 1,403,146	\$ 1,301,728

See accompanying notes to the Unaudited Condensed Consolidated Financial Statements.

DUOLINGO, INC. AND SUBSIDIARIES
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
(Amounts in thousands, except per share amounts)

	Three Months Ended March 31,	
	2025	2024
Revenues	\$ 230,743	\$ 167,553
Cost of revenues	66,647	45,191
Gross profit	164,096	122,362
Operating expenses:		
Research and development	70,390	50,878
Sales and marketing	26,662	19,931
General and administrative	43,450	35,114
Total operating expenses	140,502	105,923
Income from operations	23,594	16,439
Other income (expense), net	1,001	(621)
Income before interest income and income taxes	24,595	15,818
Interest income	10,415	10,033
Income before income taxes	35,010	25,851
Benefit from income taxes	(125)	(1,105)
Net income and comprehensive income	\$ 35,135	\$ 26,956
Net income per share attributable to Class A and Class B common stockholders, basic	\$ 0.78	\$ 0.63
Net income per share attributable to Class A and Class B common stockholders, diluted	\$ 0.72	\$ 0.57

See accompanying notes to the Unaudited Condensed Consolidated Financial Statements.

DUOLINGO, INC. AND SUBSIDIARIES
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Amounts in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total
	Shares	Amount			
BALANCE—January 1, 2024	42,526	\$ 4	\$ 869,918	\$ (214,421)	\$ 655,501
Stock-based compensation expense	—	—	24,985	—	24,985
Stock options exercised	326	—	3,610	—	3,610
Release of restricted stock units	205	—	—	—	—
Net income	—	—	—	26,956	26,956
BALANCE—March 31, 2024	43,057	\$ 4	\$ 898,513	\$ (187,465)	\$ 711,052
BALANCE—January 1, 2025	44,936	\$ 4	\$ 950,393	\$ (125,847)	\$ 824,550
Stock-based compensation expense	—	—	31,018	—	31,018
Stock options exercised	276	—	3,123	—	3,123
Release of restricted stock units	204	—	—	—	—
Net income	—	—	—	35,135	35,135
BALANCE—March 31, 2025	45,416	\$ 4	\$ 984,534	\$ (90,712)	\$ 893,826

See accompanying notes to the Unaudited Condensed Consolidated Financial Statements.

DUOLINGO, INC. AND SUBSIDIARIES
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands)

	Three Months Ended March 31,	
	2025	2024
Cash flows from operating activities:		
Net income	\$ 35,135	\$ 26,956
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	3,590	2,074
Stock-based compensation expense	31,018	24,985
Accretion on marketable securities, net	(550)	—
Changes in assets and liabilities:		
Deferred revenue	42,139	30,121
Accounts receivable	14,740	12,554
Deferred cost of revenues	(9,402)	(6,466)
Prepaid expenses and other current assets	(1,772)	(3,465)
Accounts payable	(3,843)	(398)
Accrued expenses and other current liabilities	(6,204)	(4,514)
Noncurrent assets and liabilities	780	1,667
Net cash provided by operating activities	105,631	83,514
Cash flows from investing activities:		
Purchases of investments	(26,606)	—
Maturities of investments	18,676	—
Capitalized software expense and purchases of intangible assets	(1,310)	(3,607)
Purchase of property and equipment	(1,309)	(1,414)
Net cash used for investing activities	(10,549)	(5,021)
Cash flows from financing activities:		
Proceeds from exercise of stock options	3,123	3,610
Net cash provided by financing activities	3,123	3,610
Net increase in cash, cash equivalents and restricted cash	98,205	82,103
Cash, cash equivalents and restricted cash - Beginning of period	788,526	750,345
Cash, cash equivalents and restricted cash - End of period	<u>\$ 886,731</u>	<u>\$ 832,448</u>

See accompanying notes to the Unaudited Condensed Consolidated Financial Statements.

DUOLINGO, INC. AND SUBSIDIARIES
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION
(Amounts in thousands)

	Three Months Ended March 31,	
	2025	2024
Supplemental disclosure of cash flow information:		
Cash paid for income taxes	\$ 87	\$ —
Supplemental disclosure of noncash investing activities:		
Property and equipment included in Current liabilities	\$ 162	\$ 1,070
Right of use assets obtained in exchange for new operating lease liabilities	\$ —	\$ 31,358
Right of use assets disposed of or adjusted for modifying operating leases liabilities	\$ —	\$ 1,303

See accompanying notes to the Unaudited Condensed Consolidated Financial Statements.

DUOLINGO, INC. AND SUBSIDIARIES

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. DESCRIPTION OF THE BUSINESS AND BASIS OF PRESENTATION

Duolingo, Inc. (the “Company” or “Duolingo”) was formed on August 18, 2011, and the Duolingo App was launched to the general public on June 19, 2012. The Company’s headquarters are located in Pittsburgh, Pennsylvania.

Duolingo is a US-based mobile learning platform, as well as a digital English language proficiency assessment exam. The Company has a freemium business model: the app and the website are accessible free of charge, although Duolingo also offers premium services for a subscription fee. As of the date of this filing, Duolingo offers courses in over 40 different languages, including Spanish, English, French, German, Italian, Portuguese, Japanese and Chinese. We have locations in the U.S., China and Germany.

Principles of Consolidation—The Unaudited Condensed Consolidated Financial Statements include the accounts of the Company and subsidiaries over which the Company has control. All intercompany transactions and balances have been eliminated.

Basis of Presentation—The accompanying Unaudited Condensed Consolidated Financial Statements have been prepared in accordance with generally accepted accounting principles in the U.S. (“GAAP”) from the Company’s accounting records and reflect the consolidated financial position and results of operations for the three months ended March 31, 2025 and 2024. Unless otherwise specified, all dollar amounts (other than per share amounts) are referred to in thousands.

The Unaudited Condensed Consolidated Financial Statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”). Certain information and note disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such SEC rules. We believe that the disclosures made are adequate to make the information presented not misleading. In our opinion, all adjustments considered necessary for a fair presentation of the financial statements have been included, and all adjustments are of a normal and recurring nature. We applied the accounting policies consistently with those used in the preparation of the Annual Report on Form 10-K in preparing these Unaudited Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q. These Unaudited Condensed Consolidated Financial Statements should be read in conjunction with the audited financial statements and the notes for the fiscal year ended December 31, 2024 included in the Annual Report on Form 10-K and filed with the SEC.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Accounting Principles—The Unaudited Condensed Consolidated Financial Statements and accompanying notes are prepared in accordance with GAAP.

Use of Estimates—The preparation of Unaudited Condensed Consolidated Financial Statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the Unaudited Condensed Consolidated Financial Statements and accompanying notes. Significant estimates and assumptions reflected in the Unaudited Condensed Consolidated Financial Statements include, but are not limited to, useful lives of property and equipment, valuation of deferred tax assets and liabilities, stock-based compensation, operating lease right-of-use assets and liabilities, capitalization of internally developed software and associated useful lives, contingent liabilities, and valuation of goodwill and intangible assets from acquisitions. Actual results may differ materially from such estimates. Management believes that the estimates, and judgments upon which they rely, are

reasonable based upon information available to them at the time that these estimates and judgments are made. To the extent that there are material differences between these estimates and actual results, the Company's Unaudited Condensed Consolidated Financial Statements will be affected.

Advertising Costs— Advertising costs were approximately \$17,535 and \$14,020 for the three months ended March 31, 2025 and 2024, respectively, and are included within Sales and marketing in the Unaudited Condensed Consolidated Statements of Operations and Comprehensive Income.

Income Taxes—The Company's provision for income taxes is computed by using an estimate of the annual effective tax rate, adjusted for discrete items taken into account in the relevant period, if any. Each quarter, the annual effective income tax rate is recomputed and if there are material changes in the estimate, a cumulative adjustment is made.

Concentration of Credit Risk—The Company's concentration of credit risk relates to financial institutions holding the Company's cash and cash equivalents and platforms with significant accounts receivable balances and revenue transactions.

The Company maintains deposits and certificates of deposit with banks which exceed the Federal Deposit Insurance Corporation ("FDIC") insured limit and money market accounts which are not FDIC insured. Management believes that the financial institutions that hold the Company's deposits are financially credit worthy and, accordingly, minimal credit risk exists with respect to those balances.

The majority of revenue comes through the subscriptions and advertising streams, and payments are made to Duolingo through service providers. Two service providers, Apple and Google, accounted for 67.7% and 16.2% of total Accounts receivable as of March 31, 2025, respectively. Two service providers, Apple and Google accounted for 64.7% and 21.1% of total Accounts receivable as of December 31, 2024, respectively.

Segment—The Company operates as a single operating segment and derives revenues from customers through time-based subscriptions, in-app advertising placement by third parties, the Duolingo English Test, and In-App Purchases. The Chief Executive Officer, as the chief operating decision maker, evaluates the Company's performance and allocates resources based on consolidated net income, as presented in the income statement, supplemented by disaggregated revenue details. Significant segment expenses are those that are presented on the Unaudited Condensed Consolidated Statements of Operations and Comprehensive Income. The measure of segment assets is reported on the balance sheet as total consolidated assets. Accordingly, the Company has determined that it has a single reportable segment and operating segment structure, and operates as one reporting unit.

Impairment of long-lived assets— The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If the sum of the estimated undiscounted future cash flows expected to result from the use and eventual disposition of an asset is less than the carrying amount of the asset, an impairment loss is recognized. Measurement of an impairment loss is based on the fair value of the asset. No assets were impaired during the three months ended March 31, 2025 and 2024.

Allowance for Credit Losses—The Company evaluates its cash equivalents, accounts receivable and held-to-maturity marketable securities financial assets for expected credit losses. Expected credit losses represent the portion of the amortized cost basis of a financial asset that an entity does not expect to collect. An allowance for expected credit losses is meant to reflect a risk of loss even if remote, irrespective of the expectation of collection from a particular issuer or debt security. The Company has not historically experienced any credit losses on any of its financial assets.

With respect to cash equivalents and accounts receivable, given consideration of their short maturity, lack of historical losses and the current environment, the Company concluded there is generally no expected credit losses for these financial assets. With respect to held-to-maturity marketable securities which are comprised of debt securities, the Company evaluates expected credit losses on a pooled basis based on issuer-type which have similar credit risk characteristics. There is no allowance for credit losses for all periods presented.

Recent Accounting Pronouncements

Recently Issued Pronouncements Not Yet Adopted

In December 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2023-09, *Income Taxes (Topic 740)*, which includes improvements to income tax disclosures. The standard is effective for public entities in fiscal years beginning after December 15, 2024. Early adoption is permitted. The Company does not expect the adoption of the new guidance will have a material impact on the Company's consolidated financial statements and related disclosures.

In November 2024, the FASB issued ASU 2024-03, *Income Statement-Reporting Comprehensive Income-Expense Disaggregation Disclosures* (Subtopic 220-40): Disaggregation of Income Statement Expenses. The amendment requires new financial statement disclosures to provide disaggregated information for certain types of expenses, including employee compensation, depreciation, and amortization in commonly presented expense captions such as cost of revenue, sales and marketing, and general and administrative expenses. The amendments in this ASU are effective for annual reporting periods beginning after December 15, 2026, and interim periods within fiscal years beginning after December 15, 2027. The Company is in the process of evaluating the effect that the adoption of these standards will have on its consolidated financial statements.

Recently Adopted Accounting Pronouncements

There are no recently adopted accounting pronouncements.

3. FAIR VALUE

The Company accounts for certain assets and liabilities at fair value in accordance with the accounting guidance applicable to fair value measurements and disclosures. The carrying values of cash, cash equivalents, accounts receivable, accounts payable, and accrued expenses are deemed to be reasonable estimates of their fair values because of their short-term nature.

The Company applies fair value accounting for all financial assets and liabilities and non-financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring and non-recurring basis. The Company defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities, which are required to be recorded at fair value, the Company considers the principal or most advantageous market in which the Company would transact and the market-based risk measurements or assumptions that market participants would use in pricing the asset or liability, such as inherent risk, transfer restrictions, and credit risk.

The Company applies the following fair value hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

Level 1—Observable inputs such as quoted prices in active markets for identical investments that the Company has the ability to access.

Level 2—Inputs include:

- Quoted prices for identical or similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs, other than quoted prices in active markets, which are observable either directly or indirectly;
- Inputs that are derived principally from, or corroborated by, observable market data by correlation or other means.

Level 3—Unobservable inputs in which there is little or no market activity for the asset or liability, which require the reporting entity to develop its own estimates and assumptions relating to the pricing of the asset or liability including assumptions regarding risk.

The following table presents amortized cost, gross unrealized gains and losses, and fair value by major security type and balance sheet classification as of March 31, 2025 and December 31, 2024:

(In thousands)	As of March 31, 2025						
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Cash Equivalents	Short-Term Investments	Long-Term Investments
Cash	\$ —	\$ —	\$ —	\$ 80,352	\$ 80,352	\$ —	\$ —
Level 1							
Commercial paper	\$ 12,060	\$ 13	\$ —	\$ 12,073	\$ —	\$ 12,060	\$ —
Money market funds	803,644	—	—	803,644	803,644	—	—
Subtotal	\$ 815,704	\$ 13	\$ —	\$ 815,717	\$ 803,644	\$ 12,060	\$ —
Level 2							
Asset-backed securities	\$ 20,972	\$ 9	\$ (2)	\$ 20,979	\$ —	\$ 1,842	\$ 19,130
Certificates of deposit	15,521	3	(4)	15,520	—	15,521	—
Corporate debt securities	138,324	40	(215)	138,149	—	85,861	52,463
U.S. Treasury securities	10,349	6	(6)	10,349	—	—	10,349
Subtotal	\$ 185,166	\$ 58	\$ (227)	\$ 184,997	\$ —	\$ 103,224	\$ 81,942
Level 3							
Investment in SAFE	\$ —	\$ —	\$ —	\$ 1,400	\$ —	\$ —	\$ 1,400
Subtotal	\$ —	\$ —	\$ —	\$ 1,400	\$ —	\$ —	\$ 1,400
Total	\$ 1,000,870	\$ 71	\$ (227)	\$ 1,082,466	\$ 883,996	\$ 115,284	\$ 83,342

(In thousands)		As of December 31, 2024						
		Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Cash Equivalents	Short-Term Investments	Long-Term Investments
Cash	\$	—	\$	—	\$ 73,351	\$ 73,351	\$ —	\$ —
Level 1								
Commercial paper	\$	15,659	\$	2	\$ (1)	\$ 15,661	\$ —	\$ 15,659
Money market funds		712,440		—	—	712,440	—	—
Subtotal	\$	728,099	\$	2	\$ (1)	\$ 728,101	\$ 712,440	\$ 15,659
Level 2								
Asset-backed securities	\$	16,280	\$	10	\$ (1)	\$ 16,289	\$ —	\$ 697
Certificates of deposit		11,521		—	(14)	11,507	—	11,521
Corporate debt securities		126,031		7	(494)	125,543	—	55,013
U.S. Treasury securities		19,255		2	(61)	19,195	—	8,964
Subtotal	\$	173,087	\$	19	\$ (570)	\$ 172,534	\$ —	\$ 76,195
Level 3								
Investment in SAFE	\$	—	\$	—	\$ —	\$ 1,400	\$ —	\$ —
Subtotal	\$	—	\$	—	\$ —	\$ 1,400	\$ —	\$ —
Total	\$	901,186	\$	21	\$ (571)	\$ 975,386	\$ 785,791	\$ 91,854

As of March 31, 2025 and December 31, 2024, all of the Company's short-term investments have contractual maturities of one year or less and all of the Company's long-term investments have contractual maturities between one and five years. The Company has elected to present accrued interest within Prepaid expenses and other current assets in the Unaudited Condensed Consolidated Balance Sheets. Accrued interest was \$1,614 and \$1,487 as of March 31, 2025 and December 31, 2024, respectively.

Changes in market interest rates, credit risk of borrowers and overall market liquidity, amongst other factors, may cause the short-term and long-term debt investments to fall below their amortized cost basis, resulting in unrealized losses. For those debt securities in an unrealized loss position as of March 31, 2025, the Company does not intend to sell, nor is it more likely than not that it will be required to sell, such securities before recovering the amortized cost basis. No allowance for credit losses have been recognized in the financial statements for held-to-maturity debt securities for the periods ended March 31, 2025 and 2024.

Cash equivalents consist primarily of money market accounts with maturities of three months or less at the date of acquisition and are classified within Level 1.

The Company's investments in corporate debt securities, U.S. Treasury securities, certificates of deposit, and asset-backed securities, which collectively are investments in held-to-maturity debt securities, are classified within Level 2, as their valuation requires quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and/or model-based valuation techniques for which all significant inputs are observable in the market or can be corroborated by observable market data.

4. REVENUE

Disaggregation of Revenue

In accordance with ASC 606, *Revenue from Contracts with Customers*, the Company disaggregates revenue from contracts with customers into revenue streams, which most closely depicts how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

(In thousands)	Three Months Ended March 31,	
	2025	2024
Revenues:		
Subscription	\$ 190,987	\$ 131,688
Other (1)	39,756	35,865
Total revenues	<u>\$ 230,743</u>	<u>\$ 167,553</u>

(1) Other revenue is comprised of the below.

(In thousands)	Three Months Ended March 31,	
	2025	2024
Advertising	\$ 17,882	\$ 12,952
Duolingo English Test	11,986	12,755
In-App Purchases	9,442	9,924
Other	446	234
Total other revenue	<u>\$ 39,756</u>	<u>\$ 35,865</u>

Three service providers, Apple, Google and Stripe, processed 61.3%, 23.3%, and 11.0% of total revenues for the three months ended March 31, 2025, respectively. Three services providers, Apple, Google, and Stripe processed 59.3%, 23.7% and 12.9% of total revenues for the three months ended March 31, 2024, respectively.

Deferred revenue mostly consists of payments received in advance of revenue recognition, and is mostly related to time-based subscriptions, which will be recognized into revenue over the course of the upcoming year (recognized over 12 months or less). Additionally, the Duolingo English Test has deferred revenue related to tests that have been purchased, but will not be recognized until the tests have been proctored. Changes in deferred revenues were as follows:

(In thousands)	Three Months Ended March 31,	
	2025	2024
Beginning balance—January 1	\$ 372,884	\$ 249,192
Amount from beginning balance recognized into revenue	(150,183)	(102,257)
Recognition of deferred revenue	(59,691)	(40,907)
Deferral of revenue	252,013	173,285
Ending balance—March 31	<u>\$ 415,023</u>	<u>\$ 279,313</u>

5. PROPERTY and EQUIPMENT, net

Property and equipment, net, consists of the following:

<i>(In thousands)</i>	March 31, 2025	December 31, 2024
Leasehold improvements	\$ 26,753	\$ 26,938
Furniture, fixtures and equipment	10,071	8,415
Total property and equipment	36,824	35,353
Less: accumulated depreciation	(17,663)	(16,410)
Total property and equipment, net	\$ 19,161	\$ 18,943

Depreciation expense is included within the following financial statement line items within the Company's Unaudited Condensed Consolidated Statements of Operations and Comprehensive Income.

<i>(In thousands)</i>	Three Months Ended March 31,	
	2025	2024
Research and development	\$ 756	\$ 440
Sales and marketing	95	52
General and administrative	402	575
Total	\$ 1,253	\$ 1,067

6. INTANGIBLE ASSETS AND GOODWILL

Intangible assets, net, consist of the following:

<i>(In thousands)</i>	March 31, 2025	December 31, 2024
Capitalized software	\$ 36,991	\$ 35,681
Acquired technology	1,007	1,007
Other indefinite-lived intangible assets	117	117
Total intangible assets	38,115	36,805
Less: accumulated amortization	(19,243)	(16,906)
Intangible assets, net	\$ 18,872	\$ 19,899

The Company capitalized \$1,310 and \$3,607 of software development costs, with the majority of the costs being employee wages, during the three months ended March 31, 2025 and 2024, respectively. Amortization expense is included within the following financial statement line items within the Company's Unaudited Condensed Consolidated Statements of Operations and Comprehensive Income.

<i>(In thousands)</i>	Three Months Ended March 31,	
	2025	2024
Cost of revenues	\$ 2,211	\$ 848
Sales and marketing	126	159
Total	\$ 2,337	\$ 1,007

The estimated future amortization expense of capitalized software and acquired technology with definite lives as of March 31, 2025 was as follows:

<i>(In thousands)</i>	Amortization Expense
Remainder of 2025	\$ 6,366
2026	7,417
2027	4,176
2028	482
2029	157
Thereafter	157
Total estimated future amortization expense	<u>\$ 18,755</u>

The following table represents the changes to goodwill during the three months ended March 31, 2025:

	Carrying amount
Balance as of December 31, 2024	\$ 10,538
Acquisitions	—
Balance as of March 31, 2025	<u>\$ 10,538</u>

As of March 31, 2025 and December 31, 2024, \$6,795 and \$6,923 of goodwill is deductible for tax purposes, respectively.

7. INCOME TAXES

Year-to-date income tax expense or benefit is the product of the most current projected annual effective tax rate (“PAETR”) and the actual year-to-date pretax income adjusted for any discrete items. The income tax expense or benefit for a particular quarter, is the difference between the year-to-date calculation of income tax expense or benefit and the year-to-date calculation for the prior year period. Items unrelated to current period ordinary income or loss are recognized entirely in the period identified as a discrete item of tax.

The Company’s PAETR differs from the U.S. federal statutory rate of 21.0% during the three months ended March 31, 2025 and 2024 primarily due to the impact of maintaining a U.S. valuation allowance provided on U.S. deferred tax assets.

The Company’s income before taxes, income tax benefit and effective tax rates were as follows:

<i>(In thousands, except percentages)</i>	Three Months Ended March 31,	
	2025	2024
Income before income taxes	\$ 35,010	\$ 25,851
Benefit from income taxes	(125)	(1,105)
Effective tax rate	(0.4)%	(4.3)%

For the three months ended March 31, 2025 and 2024, the Company recorded an income tax benefit of \$125 and \$1,105, respectively.

For both of the periods ended March 31, 2025 and March 31, 2024, the Company has recognized a year-to-date discrete tax benefit attributable to the excess tax benefits of stock-based compensation activity.

The Company periodically evaluates the realizability of its net deferred tax assets based on all available evidence, both positive and negative. The realization of net deferred tax assets is dependent on the Company's ability to generate sufficient future taxable income to fully utilize these assets. As of March 31, 2025, the Company continues to maintain a full allowance against its U.S. federal and state net deferred tax assets.

Given the Company's recent history of earnings, management believes there is a reasonable possibility that, during the year, sufficient positive evidence may become available to support a conclusion that a significant portion of the valuation allowance recorded against the deferred tax assets will be reversed. The reversal would result in an income tax benefit for the quarterly and annual fiscal period in which the Company releases the valuation allowance. However, the exact timing and amount of the valuation allowance release are subject to change on the basis of the level of profitability that the Company actually achieves.

8. STOCK-BASED COMPENSATION

Prior to the IPO, the Company granted options to purchase shares of the Company's common stock and restricted stock units ("RSU") in respect of shares of the Company's common stock to employees, directors and consultants under the Company's 2011 Equity Incentive Plan. In connection with the IPO, the Company adopted the 2021 Incentive Award Plan ("2021 Plan") and the 2021 Employee Stock Purchase Plan ("ESPP"), both of which became effective on July 26, 2021. The 2021 Plan and ESPP include an annual share increase provision through January 1, 2031, subject to limits and Board discretion. On January 1, 2025, the number of Class A shares available under the 2021 Plan was increased by 2,247 shares of common stock. No grants have been made under the ESPP, and in February 2025, the Board waived all future automatic share increases under the ESPP.

The Company's stock options generally vest over four years based on continued service to the Company and its subsidiaries. Each option has a term of ten years. Any stock options granted under the 2021 Plan must generally have an exercise price of not less than the estimated fair market value of the underlying Class A common stock at the date of the grant, but as of March 31, 2025 no options had been granted under the 2021 Plan.

A summary of stock option activity as of March 31, 2025 is as follows:

<i>(In thousands, except prices and years)</i>	Number of options	Weighted- average exercise price	Weighted- average remaining contractual life (years)	Aggregate intrinsic value
Options outstanding at January 1, 2025	1,523	\$ 18.73	4.67	\$ 465,985
Granted (1)	—			
Exercised	(276)	11.31		
Forfeited and expired (2)	—	—		
Options outstanding at March 31, 2025	1,247	\$ 20.37	4.64	\$ 362,445
Options exercisable at March 31, 2025	1,247	\$ 20.30	4.64	\$ 362,416

(1) There were no stock options granted during the three months ended March 31, 2025.

(2) There was a nominal amount of forfeitures and expirations during the three months ended March 31, 2025.

The total intrinsic value of options exercised was approximately \$90,743 and \$64,343 for the periods ended March 31, 2025 and 2024, respectively.

The Company began to grant RSUs in November 2020. The fair value of RSUs is estimated based on the fair value of our Class A common stock on the date of grant. Each RSU vests based upon the satisfaction of length of service. The Company measures and recognizes stock-based compensation expense for all stock-based awards based on the estimated fair value of the award.

A summary of RSU activity as of March 31, 2025 is as follows:

<i>(In thousands, except prices)</i>	Restricted stock units	Weighted-average grant date fair value per share
Outstanding at January 1, 2025	1,802	\$ 143.96
Granted	80	432.69
Released	(204)	113.76
Forfeited	(34)	129.48
Outstanding at March 31, 2025	1,644	\$ 162.06

As of March 31, 2025, there was approximately \$2 of unrecognized stock-based compensation expense related to stock options granted under the plans with a weighted-average period of approximately 1 month. The amount of unrecognized stock-based compensation expense for RSUs as of March 31, 2025 was \$241,920 with a weighted-average period of approximately three years. Total unrecognized compensation expense as of March 31, 2025 was \$241,922.

There were 8,905 shares available for grant at March 31, 2025.

Performance-based RSUs

In June 2021, the Company granted an aggregate of 1,800 performance-based RSUs (the “Founder Awards”) to its founders. Vesting is subject to both service- and performance-based conditions, with settlement occurring one year after vesting. The awards vest in 10 tranches based on stock-price hurdles measured over a ten year period from the grant date. The service condition vests 25% annually beginning on the IPO anniversary, July 30, 2021, subject to continued service.

The Company used a Monte Carlo simulation to estimate the fair value of the Founder Awards. The weighted-average grant date fair value was \$61.56 per share, and total estimated expense to be recognized over the derived service periods (ranging from 3.58 to 5.92 years) is \$110,817. Stock-based compensation expense is recognized over the derived service period, regardless of whether the stock-price hurdles are achieved, and is accelerated if hurdles are met earlier.

The Company recognized \$4,114 and \$5,540 of stock-based compensation expense related to the Founder Awards for the three months ended March 31, 2025 and 2024, respectively. As of March 31, 2025, \$12,822 of unrecognized stock-based compensation expense remains.

Total stock-based compensation expense was \$31,018 and \$24,985 for the three months ended March 31, 2025 and 2024, respectively.

Stock-based compensation expense is included in the Unaudited Condensed Consolidated Statements of Operations and Comprehensive Income as shown in the following table:

(In thousands)	Three Months Ended March 31,	
	2025	2024
Cost of revenues	\$ 20	\$ 16
Research and development	17,813	13,006
Sales and marketing	1,431	1,054
General and administrative	11,754	10,909
Total	<u>\$ 31,018</u>	<u>\$ 24,985</u>

Nominal amounts of stock-based compensation expense is capitalized into intangible assets for the three months ended March 31, 2025 and 2024.

9. COMMITMENTS AND CONTINGENCIES

Legal Proceedings— From time to time, the Company may become involved in various legal proceedings in the ordinary course of its business and may be subject to third-party infringement claims. The outcome of any such claims or proceedings, regardless of the merits, is inherently uncertain. The Company is not currently party to any material legal proceedings.

Related Parties— The Company has determined that there were no transactions with related parties as of or during the three months ended March 31, 2025 and 2024.

Letters of Credit— The Company has a standby letter of credit obtained in connection with an operating lease. This letter of credit acts as security for the faithful performance by us of all terms, covenants and conditions of the lease agreement. The amount of the letter of credit is equal to six months rent of \$442, totaling \$2,656. The cash collateral for the letter of credit has been recognized as restricted cash in the Unaudited Condensed Consolidated Balance Sheet and is equivalent to 103% of the letter of credit and totaled \$2,735.

10. EMPLOYEE BENEFIT PLAN

The Company sponsors a profit sharing plan with a 401(k) feature, the Duolingo Retirement Plan (the “Plan”), for eligible employees. The current Plan, effective January 1, 2021, provides for Company safe harbor matching contributions of 100% of the first 4% of the employees’ elective deferrals and 50% of the next 2%, with vesting starting upon the first day of employment. The Company also has the option to make discretionary matching or profit sharing contributions. The Company made safe harbor matching contributions of approximately \$1,969 and \$1,583 during the three months ended March 31, 2025 and 2024, respectively. The Company did not make any discretionary matching or profit sharing contributions during the three months ended March 31, 2025 or 2024.

11. EARNINGS PER SHARE

Basic and diluted net income per share attributable to common stockholders is presented in conformity with the two-class method required for participating securities.

Basic net income per share attributable to common stockholders is calculated by dividing the net income by the weighted-average number of shares of common stock outstanding during the period, less shares subject to repurchase. The diluted net income per share attributable to common stockholders is calculated by giving effect to all potential dilutive common stock equivalents outstanding for the period. The rights, including the liquidation and dividend rights, of the holders of Class A and Class B common stock are identical, except with respect to voting and conversion. Each share of Class A common stock is

entitled to one vote per share and each share of Class B common stock is entitled to 20 votes per share. Each share of Class B common stock is convertible into a share of Class A common stock voluntarily at any time by the holder, and automatically upon certain events. The Class A common stock has no conversion rights. As the liquidation and dividend rights are identical for Class A and Class B common stock, the undistributed earnings are allocated on a proportional basis and the resulting net income per share attributable to common stockholders will, therefore, be the same for both Class A and Class B common stock on an individual or combined basis.

<i>(In thousands, except per share data)</i>	Three Months Ended March 31,	
	2025	2024
Numerator:		
Net income attributable to Class A and Class B common stockholders	\$ 35,135	\$ 26,956
Denominator:		
Weighted-average shares in computing net income per share attributable to Class A and Class B common stockholders, basic and diluted	45,148	42,780
Effect of dilutive securities		
Founder awards where performance has been met	540	270
Dilutive effect of stock options outstanding (1)	1,165	2,459
RSUs outstanding	1,644	1,844
Denominator for dilutive net income per common share - weighted-average shares	48,497	47,353
Basic income per common share	\$ 0.78	\$ 0.63
Diluted income per common share	\$ 0.72	\$ 0.57

(1) The Company had 1.2 million options outstanding as of March 31, 2025. The estimated dilutive effect is calculated as the number of shares expected to be issued upon vesting or exercise, adjusted for the strike price proceeds that are received by the Company and assumed to be used to repurchase shares of Duolingo common stock.

12. SUBSEQUENT EVENTS

None.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our Unaudited Condensed Consolidated Financial Statements and related notes included elsewhere in this Quarterly Report on Form 10-Q, the audited consolidated financial statements and related notes included in our Annual Report on Form 10-K and in Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K. The following discussion contains forward-looking statements, such as those relating to our plans, objectives, expectations, intentions, and beliefs, that involve risks, uncertainties and assumptions. Our actual results could differ materially from these forward-looking statements as a result of many factors, including those discussed in "Special Note Regarding Forward-Looking Statements," and included elsewhere in this Quarterly Report on Form 10-Q, and in Part I, Item 1A. "Risk Factors," and Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that may be expected for any periods in the future.

Amounts reported in millions are rounded based on the amounts in thousands. As a result, the sum of the components reported in millions may not equal the total amount reported in millions due to rounding. In

addition, percentages presented are calculated from the underlying numbers in thousands and may not add to their respective totals due to rounding.

Overview

Our flagship app has organically become the world’s most popular way to learn languages and the top-grossing Education app in the App Stores, offering courses in over 40 languages to over 130 million monthly active users for the three months ended March 31, 2025. We believe that we have become the preeminent online destination for language learning due to our beautifully designed products, exceptional user engagement, and demonstrated learning efficacy.

Key Operating Metrics and Non-GAAP Financial Measures

We regularly review a number of key operating metrics and non-GAAP financial measures to evaluate our business, measure our performance, identify trends, prepare financial projections and make business decisions. The measures set forth below should be considered in addition to, not as a substitute for or in isolation from, our financial results prepared in accordance with generally accepted accounting principles in the U.S. (“GAAP”). Monthly active users (MAUs) and daily active users (DAUs), along with paid subscribers, subscription bookings and total bookings, are operating metrics that help inform management about the underlying growth in users of our platform, and are a measure of our monetization efforts. To calculate the year-over-year change in MAUs and DAUs for a given period, we subtract the average for the same period in the previous year from the average for the same period in the current year and divide the result by the average for the same period in the previous year. Other companies, including companies in our industry, may calculate these measures differently or not at all, which reduces their usefulness as comparative measures.

(In millions)	Three Months Ended March 31,	
	2025	2024
Operating Metrics		
Monthly active users (MAUs)	130.2	97.6
Daily active users (DAUs)	46.6	31.4
Paid subscribers (at period end)	10.3	7.4
(In thousands)	Three Months Ended March 31,	
	2025	2024
Operating Metrics		
Subscription bookings	\$ 232,184	\$ 161,466
Total bookings	\$ 271,648	\$ 197,452
Non-GAAP Financial Measures		
Net income (GAAP)	\$ 35,135	\$ 26,956
Adjusted EBITDA	\$ 62,804	\$ 44,005
Net cash provided by operating activities (GAAP)	\$ 105,631	\$ 83,514
Free cash flow (1)	\$ 103,012	\$ 78,493

(1) The prior period has been recast to conform to current period presentation.

Operating Metrics

Monthly active users (MAUs). MAUs are defined as unique users who engage with our Duolingo App or the learning section of our website each month. MAUs are reported for a measurement period by taking the average of the MAUs for each calendar month in that measurement period. The measurement period for MAUs is the three months ended March 31, 2025 and the same period in the prior year where applicable, and the analysis of results is based on those periods. MAUs are a measure of the size of our global active user community on Duolingo.

We had approximately 130.2 million and 97.6 million MAUs for the three months ended March 31, 2025 and 2024, respectively, representing an increase of 33% from the prior year period. We grew MAUs through product initiatives designed to make the app more social and engaging, through marketing, and through improving our courses, all of which we believe helped us attract new users, retain existing users, and reengage the millions of former users who return to our Duolingo App.

Daily active users (DAUs). DAUs are defined as unique users who engage with our Duolingo App or the learning section of our website each calendar day. DAUs are reported for a measurement period by taking the average of the DAUs for each day in that measurement period. The measurement period for DAUs is the three months ended March 31, 2025 and the same period in the prior year where applicable, and the analysis of results is based on those periods. DAUs are a measure of the consistent engagement of our global user community on Duolingo.

We had approximately 46.6 million and 31.4 million DAUs for the three months ended March 31, 2025 and 2024, respectively, representing an increase of 49% from the prior year period. The DAU / MAU ratio, which we believe is an indicator of user engagement, increased to 35.8% from 32.1% a year ago. We grew DAUs through many of the same marketing and product initiatives as we grew MAUs, such as making the product more fun and engaging.

Paid Subscribers. Paid subscribers are defined as users who pay for access to any Duolingo subscription offering and had an active subscription as of the end of the measurement period. Each unique user account is treated as a single paid subscriber regardless of whether such user purchases multiple subscriptions, and the count of paid subscribers does not include users who are currently on a free trial or who are non-paying members of a family plan.

As of March 31, 2025 and 2024, we had approximately 10.3 million and 7.4 million paid subscribers, respectively, representing an increase of 40% from the prior year period. We grew paid subscribers through product initiatives designed to make Duolingo subscription offerings more appealing, which we believe helped us attract new subscribers and retain existing subscribers.

Subscription Bookings and Total Bookings. Subscription bookings represent the amounts we receive from a purchase of any Duolingo subscription offering. Total bookings include subscription bookings, income from advertising networks for advertisements served to our users, purchases of the Duolingo English Test, and in-app purchases of virtual goods. We believe bookings provide an indication of trends in our operating results, including cash flows, that are not necessarily reflected in our revenues because we recognize subscription revenues ratably over the lifetime of a subscription, the majority of which are twelve months in duration.

For the three months ended March 31, 2025 and 2024, we generated \$232.2 million and \$161.5 million of subscription bookings, respectively, representing an increase of \$70.7 million, or 44% from the prior year period. We grew subscription bookings by selling more first-time and renewal subscriptions.

For the three months ended March 31, 2025 and 2024, we generated \$271.6 million and \$197.5 million total bookings, respectively, representing an increase of \$74.2 million, or 38% from the prior year period. We grew total bookings primarily through growth in subscription bookings as noted above.

Non-GAAP Financial Measures

We use certain non-GAAP financial measures to supplement our Unaudited Condensed Consolidated Financial Statements, which are presented in accordance with GAAP. These non-GAAP financial measures include Adjusted EBITDA, free cash flow and constant currency. We use these non-GAAP financial measures for financial and operational decision-making and as a means to evaluate period-to-period comparisons. By excluding certain items that may not be indicative of our recurring core operating results, we believe that Adjusted EBITDA, free cash flow and constant currency provide meaningful supplemental information regarding our performance. The effect of currency exchange rates on our business is an important factor in understanding period to period comparisons. We use non-GAAP constant currency measures and non-GAAP percentage change in constant currency measures for financial and operational decision-making and as a means to evaluate period-to-period comparisons. Accordingly, we believe these non-GAAP financial measures are useful to investors and others because they allow for additional information with respect to financial measures used by management in its financial and operational decision-making and they may be used by our institutional investors and the analyst community to help them analyze the health of our business. However, there are a number of limitations related to the use of non-GAAP financial measures, and these non-GAAP financial measures should be considered in addition to, not as a substitute for or in isolation from, our financial results prepared in accordance with GAAP. Other companies, including companies in our industry, may calculate these non-GAAP financial measures differently or not at all, which reduces their usefulness as comparative measures.

Adjusted EBITDA. Adjusted EBITDA is defined as net income excluding interest income, income taxes, depreciation and amortization, stock-based compensation expenses related to equity awards, and acquisition earn-out costs. Adjusted EBITDA is used by management to evaluate the financial performance of our business and we present Adjusted EBITDA because we believe it is helpful in highlighting trends in our operating results and that it is frequently used by analysts, investors and other interested parties to evaluate companies in our industry. The following table presents a reconciliation of our net income, the most directly comparable financial measure presented in accordance with GAAP, to Adjusted EBITDA.

(In thousands)	Three Months Ended March 31,	
	2025	2024
Net income	\$ 35,135	\$ 26,956
Add (deduct):		
Interest income	(10,415)	(10,033)
Benefit from income taxes	(125)	(1,105)
Depreciation and amortization	3,590	2,074
Stock-based compensation expenses related to equity awards (1)	34,519	26,113
Acquisition earn-out costs (2)	100	—
Adjusted EBITDA	<u>\$ 62,804</u>	<u>\$ 44,005</u>

- (1) In addition to stock-based compensation expense of \$31.0 million and \$25.0 million for the three months ended March 31, 2025 and 2024, respectively, this includes costs incurred related to taxes paid on equity transactions as follows:

<i>(In thousands)</i>	Three Months Ended March 31,	
	2025	2024
Research and development	\$ 1,159	\$ 536
Sales and marketing	72	29
General and administrative	2,270	563
Total	<u>\$ 3,501</u>	<u>\$ 1,128</u>

- (2) Represents costs incurred related to the earn-out payments on an acquisition, which is included within General and administrative expense within our Unaudited Condensed Consolidated Statements of Operations and Comprehensive Income.

For the three months ended March 31, 2025 and 2024, we generated net income of \$35.1 million and \$27.0 million, respectively, representing an increase of \$8.2 million. The increase in net income as compared to the comparative period was primarily due to our growth in revenue, offset by an increase in stock-based compensation expenses related to equity awards.

For the three months ended March 31, 2025 and 2024, we generated Adjusted EBITDA of \$62.8 million and \$44.0 million, respectively, representing an increase of \$18.8 million. Adjusted EBITDA increased due to a our growth in revenue.

Free Cash Flow. Free cash flow is defined as net cash provided by operating activities, less capitalized software development costs and purchases of property and equipment. Beginning in the first quarter of 2025, we have aligned our calculation of free cash flow to this definition, and prior periods in this Quarterly Report on Form 10-Q have been recast to conform to this presentation. We believe that free cash flow is a measure of liquidity that provides useful information to our management, investors and others in understanding and evaluating the strength of our liquidity and future ability to generate cash that can be used for strategic opportunities or investing in our business. Free cash flow has certain limitations in that it does not represent our residual cash flow for discretionary expenditures and our non-discretionary commitments. The following table presents a reconciliation of net cash provided by operating activities, the most directly comparable financial measure calculated in accordance with GAAP, to free cash flow:

<i>(In thousands)</i>	Three Months Ended March 31,	
	2025	2024
Net cash provided by operating activities	\$ 105,631	\$ 83,514
Less: Capitalized software development costs and purchases of intangible assets	(1,310)	(3,607)
Less: Purchases of property and equipment	(1,309)	(1,414)
Free cash flow (1)	<u>\$ 103,012</u>	<u>\$ 78,493</u>

- (1) The prior period has been recast to conform to current period presentation.

For the three months ended March 31, 2025 and 2024, we generated \$105.6 million and \$83.5 million of net cash provided by operating activities, respectively, representing an increase of \$22.1 million. The

increases were primarily due to higher net income adjusted for non-cash items and changes in working capital, including an increase in deferred revenue.

For the three months ended March 31, 2025 and 2024, we generated \$103.0 million and \$78.5 million of free cash flow, respectively, representing an increase of \$24.5 million. The increase in free cash flow was mainly attributable to the increase in net cash provided by operating activities.

Constant Currency. The effect of currency exchange rates on our business is an important factor in understanding period to period comparisons. We use non-GAAP percentage change in constant currency revenues and bookings, which exclude the impact of fluctuations in foreign currency exchange rates, for financial and operational decision-making and as a means to evaluate period-to-period comparisons. We believe this information is useful to investors to facilitate comparisons and better identify trends in our business. The impact of changes in foreign currency may vary significantly from period to period, and such changes generally are outside of the control of our management. We calculate constant currency revenues by translating current period foreign currency revenues using prior-year exchange rates applied consistently over the full revenue recognition period. We calculate constant currency bookings by using current period foreign currency bookings and translating them to constant currency using prior year comparable period exchange rates. The constant currency percentage change for revenues and bookings is calculated by dividing the difference between the constant currency amount and the prior year comparable period amount by the prior year comparable period amount.

Total revenues were \$230.7 million for the three months ended March 31, 2025, which represents an increase of 38% on a reported basis and 40% on a constant currency basis, over the three months ended March 31, 2024. Subscription revenues totaled \$191.0 million for the three months ended March 31, 2025, which represents an increase of 45% on a reported basis and 47% on a constant currency basis over the three months ended March 31, 2024.

Total bookings were \$271.6 million for the three months ended March 31, 2025, which represents an increase of 38% on a reported basis and 42% on a constant currency basis, over the three months ended March 31, 2024. Subscription bookings totaled \$232.2 million for the three months ended March 31, 2025, which represents an increase of 44% on a reported basis and 48% on a constant currency basis, over the three months ended March 31, 2024.

Components of Our Results of Operations

Revenue

We generate revenues primarily from the sale of subscriptions. The term-length of our subscription agreements are primarily monthly or annual, with the family plan offered as an annual subscription. We also generate revenue from advertising, the in-app sale of virtual goods, and the Duolingo English Test, as well as from Duo's Taquería.

Cost of Revenues

Cost of revenues predominantly consists of third-party payment processing fees charged by various distribution channels in addition to hosting fees and generative AI costs. To a much lesser extent, cost of revenues includes customer support costs, such as contractor fees, wages and stock-based compensation for certain employees working in customer support. It also includes the amortization of revenue generating capitalized software, and depreciation of certain property and equipment.

We intend to continue to invest additional resources in our infrastructure to expand the capabilities of our platform and ensure that our users are realizing the full benefit of our products. The level, timing, and relative investment in these areas could affect our cost of revenues in the future.

Gross Profit and Gross Margin

Gross profit represents revenues less cost of revenues. Gross margin is gross profit expressed as a percentage of revenues. Our gross profit may fluctuate from period to period as our revenues fluctuate, and also as a result of the timing and amount of investments we make in items related to cost of revenues.

Operating Expenses

Our operating expenses consist of research and development, sales and marketing, and general and administrative expenses. Personnel costs are the most significant component of operating expenses and consist of salaries, benefits, and stock-based compensation expense. Operating expenses also include overhead costs for facilities, including depreciation expense.

Research and Development. We invest heavily in research and development to create new products and product features that help us grow our user base, engage our users, monetize our users, and teach our users. This, in turn, drives additional growth in, and better lifetime value of, our paid subscribers, as well as increased advertising revenue from impressions from our free users. Expenses are primarily made up of costs incurred for the development of new and improved products and features in our applications during the preliminary product development stage. Such expenses include employee-related compensation, including stock-based compensation, of engineers, designers, and product managers, in addition to materials, travel and direct costs associated with the design, required testing of our platform and depreciation of certain property and equipment. We expect engineers, designers, and product managers to represent a significant portion of our employees for the foreseeable future. We typically capitalize a small portion of research and development costs once the product has reached application development phase, mostly consisting of wages, each period into capitalized software when the work is specific to launching a new product, or making major upgrades to our existing products or platforms. We regularly test product improvements with our users. Many of these tests start by making small changes in the product that affect small numbers of users. As the tests evolve, they can require increasing investment and can impact more users. This process of constant testing is how we implement many of our new products and improvements to our platform and, in total, require large investments and involve substantial time and risks to develop and launch. Some of these products and product improvements may not be well received or may take a long time for users to adopt. As a result, the benefits of our research and development investments may be difficult to forecast.

Sales and Marketing. Sales and marketing expenses are expensed as incurred and consists primarily of new user acquisition, brand marketing, digital and social media content, and employee-related compensation, including stock-based compensation, for personnel engaged in sales and marketing functions, amortization of non-revenue generating capitalized software used to promote Duolingo and depreciation of certain property and equipment.

General and Administrative. General and administrative expenses primarily consist of employee-related compensation, including stock-based compensation, for management and administrative functions, including our finance and accounting, legal, and people teams. General and administrative expenses also include certain professional services fees, general corporate and director and officer insurance, our facilities costs, public company costs to comply with the rules and regulations of the Securities and Exchange Commission ("SEC") and the Listing Rules of the Nasdaq Global Select Market, and other general overhead costs that support our operations.

Interest Income

Interest income consists of income earned on our cash and money market funds included in cash and cash equivalents and income earned and net accretion on our marketable securities.

Other income (expense), net

Other income (expense), net consists primarily of foreign currency exchange gains and losses.

Benefit from income taxes

The benefit for income taxes represents the tax impact associated with our operations under the tax laws of the jurisdictions in which we operate. In addition to the U.S., we also operate in foreign jurisdictions that have different statutory rates. Our effective tax rates will vary depending on the relative proportion of foreign to domestic income, changes in the valuation of our deferred tax assets and liabilities, and changes in tax laws.

Results of Operations

Comparison of the three months ended March 31, 2025 and 2024

The following table sets forth our Unaudited Condensed Consolidated Statements of Operations and Comprehensive Income data, including year-over-year change, for the periods indicated:

(In thousands)	Three Months Ended March 31,		% Change
	2025	2024	
Revenues	\$ 230,743	\$ 167,553	38
Cost of revenues (1) (2)	66,647	45,191	47
Gross profit	164,096	122,362	34
Operating expenses:			
Research and development (1) (2)	70,390	50,878	38
Sales and marketing (1) (2)	26,662	19,931	34
General and administrative (1) (2)	43,450	35,114	24
Total operating expenses	140,502	105,923	33
Income from operations	23,594	16,439	44
Other income (expense), net	1,001	(621)	nm
Income before interest income and income taxes	24,595	15,818	55
Interest income	10,415	10,033	4
Income before income taxes	35,010	25,851	35
Benefit from income taxes	(125)	(1,105)	(89)
Net income and comprehensive income	\$ 35,135	\$ 26,956	30%

(1) Includes stock-based compensation expenses as follows:

(In thousands)	Three Months Ended March 31,	
	2025	2024
Cost of revenues	\$ 20	\$ 16
Research and development	17,813	13,006
Sales and marketing	1,431	1,054
General and administrative	11,754	10,909
Total	\$ 31,018	\$ 24,985

(2) Includes amortization of capitalized software and depreciation of property and equipment as follows:

<i>(In thousands)</i>	Three Months Ended March 31,	
	2025	2024
Cost of revenues (a)	\$ 2,211	\$ 848
Research and development	756	440
Sales and marketing (a)	221	211
General and administrative	402	575
Total	\$ 3,590	\$ 2,074

(a) Amortization of capitalized software is recorded to Cost of revenue and Sales and marketing for revenue and non-revenue generating capitalized software, respectively.

The following table sets forth the components of our Unaudited Condensed Consolidated Statements of Operations and Comprehensive Income for each of the periods presented as a percentage of revenue.

	Three Months Ended March 31,	
	2025	2024
Revenues	100 %	100 %
Cost of revenues	29	27
Gross profit	71	73
Operating expenses:		
Research and development	31	30
Sales and marketing	12	12
General and administrative	19	21
Total operating expenses	61	63
Income from operations	10	10
Other income (expense), net	—	—
Income before interest income and income taxes	11	9
Interest income	5	6
Income before income taxes	15	15
Benefit from income taxes	—	(1)
Net income and comprehensive income	15 %	16 %

Revenues

Revenues increased by \$63.2 million, or 38%, to \$230.7 million during the three months ended March 31, 2025, from revenues of \$167.6 million during the three months ended March 31, 2024. The main drivers of the increase were:

- Subscription revenue increased by \$59.3 million, or 45%, to \$191.0 million during the three months ended March 31, 2025, primarily due to an increase in the average number of paid subscribers during the period;
- Other revenue increased by \$3.9 million, or 11%, to \$39.8 million during the three months ended March 31, 2025, primarily driven by increased advertising revenue resulting from the increase in DAUs, which resulted in increased advertisements served, offset by decreases in average revenue per DAU.

The following table provides the changes in revenues by product type:

(in thousands)	Three Months Ended March 31,		Change	% Change
	2025	2024		
Subscription	\$ 190,987	\$ 131,688	\$ 59,299	45
Other (1)	39,756	35,865	3,891	11
Total revenues	\$ 230,743	\$ 167,553	\$ 63,190	38

(1) Other revenue is comprised mainly of Advertising, Duolingo English Test, and In-App Purchases.

Cost of Revenues and Gross Margin. Total gross margin decreased to 71.1% from 73.0% during the three months ended March 31, 2025 and 2024. This was mainly due to lower subscription gross margin as a result of increased generative AI costs year over year related to expansion of the Duolingo Max subscription tier.

The following table provides the change in cost of revenues, along with related gross margins:

(In thousands, except gross margin)	Three Months Ended March 31,					
	2025		2024		Change	
	Costs	Gross Margin	Costs	Gross Margin	Costs	Gross Margin
Total cost of revenues	\$ 66,647	71.1 %	\$ 45,191	73.0 %	\$ 21,456	(1.9)%

Operating Expenses

Research and Development. Research and development expense increased by \$19.5 million, or 38%, to \$70.4 million during the three months ended March 31, 2025 from \$50.9 million during the three months ended March 31, 2024. The increase was mainly due to:

- Increased net personnel costs of \$16.7 million, driven primarily by the growth in headcount. Total gross personnel costs increased by \$14.6 million, including increased stock-based compensation expense of \$5.4 million. Additionally, there was an increase of \$2.1 million due to a reduction in wages recorded as capitalized software as compared to the prior year;
- Increased web services and technology costs of \$2.2 million; and
- Increased travel and other costs of \$0.6 million.

Research and development continues to be our largest operating expense as we test and experiment with new products and product features and improve existing ones to drive engagement and efficacy. Increased engagement and efficacy, we believe, help drive organic growth in MAUs and DAUs, growth in, and better retention of, paid subscribers, as well as increased advertising opportunities with free users.

Sales and Marketing. Sales and marketing expense increased by \$6.7 million, or 34%, to \$26.7 million during the three months ended March 31, 2025 from \$19.9 million during the three months ended March 31, 2024.

This increase was mainly due to:

- Increased direct marketing and other expenses of \$4.8 million; and
- Increased personnel costs of \$1.9 million driven primarily by the growth in headcount, including increased stock-based compensation expense of \$0.4 million.

General and Administrative. General and administrative expense increased by \$8.3 million, or 24%, to \$43.5 million during the three months ended March 31, 2025 from \$35.1 million during the three months ended March 31, 2024. This increase was mainly due to:

- Increased net personnel costs of \$4.9 million, including an increase of \$2.6 million in stock-based compensation related expense;
- Increased travel and meals expenses of \$1.5 million;
- Increased web services and technology costs of \$1.4 million;
- Increased tax related expenses of \$0.8 million; and
- Increased office and other expenses of \$0.9 million.

The above increases were partially offset by decreases in facility-related and professional costs of \$1.2 million.

Interest Income

Interest income increased by \$0.4 million, or 4%, to \$10.4 million during the three months ended March 31, 2025, from \$10.0 million during the three months ended March 31, 2024. The increase was due to higher average interest-bearing balances offset by slightly lower interest rates.

Other income (expense), net

Other income (expense), net increased by \$1.6 million, during the three months ended March 31, 2025, mainly from the impact from changes in foreign currency rates.

Benefit from income taxes

Income tax benefit was \$0.1 million during the three months ended March 31, 2025, compared to \$1.1 million during the three months ended March 31, 2024. The change in income tax benefit was primarily driven by the impact of the Foreign-Derived Intangible Income (FDII) deduction related to foreign sales, the tax effects of stock-based compensation, and limitations on the deductibility of executive compensation under U.S. federal and state tax laws.

Liquidity and Capital Resources

We finance our operations primarily through revenues and the net proceeds we have received from the issuance of equity.

As of March 31, 2025, we had \$884.0 million in cash and cash equivalents and \$115.3 million of short-term investments. Our cash and cash equivalents primarily consist of bank deposits and money market funds. Our short-term investments consist mainly of corporate debt securities, certificates of deposit, and commercial paper.

We believe that our existing cash and cash equivalents, short-term investments and cash flow from operations will be sufficient to support working capital and capital expenditure requirements for at least the next 12 months. Our future capital requirements will depend on many factors, including our subscription growth rate and renewal activity, the timing of cash received from our payment processing platforms, the expansion and efficacy of our sales and marketing activities, the introduction of new products and the enhancements to existing products, and the current uncertainty in the global markets impacting, for example, consumer spending, inflation and foreign currency exchange rates. If we cannot meet our future capital requirements, we may be required to seek additional liquidity. If we are unable to

raise additional capital or generate cash flows necessary to expand our operations and invest in continued innovation, we may not be able to compete successfully, which would harm our business and financial condition and results of operations.

A substantial source of our cash from operations comes from deferred revenue, which is included in the liabilities section of our Unaudited Condensed Consolidated Balance Sheet. Deferred revenues consists of the unearned portion of customer billings, which is recognized as revenue in accordance with our revenue recognition policy. As of March 31, 2025, we had deferred revenues of \$415.0 million, which is recorded as a current liability and expected to be recognized as revenue in the next 12 months, provided all other revenue recognition criteria have been met.

The following table summarizes our cash flows for the periods presented:

<i>(In thousands)</i>	Three Months Ended March 31,	
	2025	2024
Net cash provided by operating activities	\$ 105,631	\$ 83,514
Net cash used for investing activities	(10,549)	(5,021)
Net cash provided by financing activities	3,123	3,610
Net increase in cash, cash equivalents and restricted cash	\$ 98,205	\$ 82,103

Operating Activities

Cash flows from operating activities can fluctuate significantly from period to period due to timing of payments and cash collections. Our largest source of operating cash is cash collection from sales of subscriptions to our users. Our primary uses of cash from operating activities are for personnel expenses, marketing expenses, hosting expenses, and overhead expenses.

Cash provided by operating activities increased by \$22.1 million, or 26%, to \$105.6 million for the three months ended March 31, 2025 from \$83.5 million for the three months ended March 31, 2024. This increase was primarily driven by higher net income during the current period, which included increased non-cash stock-based compensation expense. Additionally, growth in deferred revenue contributed to the increase in cash provided by operating activities.

Investing Activities

Cash used for investing activities increased by \$5.5 million to \$10.5 million for the three months ended March 31, 2025, from \$5.0 million for the three months ended March 31, 2024. The increase was primarily driven by purchases of investments of \$26.6 million during the current period. This increase was partially offset by maturities of investments of \$18.7 million, decreased capitalized software and decreased purchases of property and equipment during the current period.

Financing Activities

Cash provided by financing decreased by \$0.6 million to \$3.1 million for the three months ended March 31, 2025, from \$3.6 million for the three months ended March 31, 2024. Cash provided by financing activities in both periods is due to proceeds from exercises of stock options.

Critical Accounting Estimates

Our Unaudited Condensed Consolidated Financial Statements and the related notes thereto included elsewhere in this Quarterly Report on Form 10-Q are prepared in accordance with GAAP. The preparation of Unaudited Condensed Consolidated Financial Statements also requires us to make estimates and

assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results could differ significantly from the estimates made by management. To the extent that there are differences between our estimates and actual results, our future financial statement presentation, financial condition, results of operations, and cash flows will be affected.

There have been no material changes to our critical accounting policies and estimates as compared to those described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” set forth in our Annual Report on Form 10-K.

Recent Accounting Pronouncements

See Note 1, “Description of the Business and Basis of Presentation,” and Note 2, “Summary of Significant Accounting Policies,” in the notes to our Unaudited Condensed Consolidated Financial Statements included in Part I, Item I of this Quarterly Report on Form 10-Q for a discussion of recent accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

As of March 31, 2025, we had \$803.6 million of cash equivalents invested in money market funds and \$198.6 million of investments mainly in corporate debt securities, U.S. Treasury securities, certificates of deposit, and commercial paper. Our cash and cash equivalents are held for working capital purposes in addition to future investments in our product. We do not enter into investments for trading or speculative purposes. Our investments are exposed to market risk due to a fluctuation in interest rates, which may affect our interest income and the fair market value of our investments. As of March 31, 2025, a hypothetical 10% relative change in interest rates would not have a material impact on our Unaudited Condensed Consolidated Financial Statements.

Foreign Currency Exchange Risk

Our reporting currency and the functional currency of our wholly owned foreign subsidiaries is the U.S. dollar. Certain of our payment providers translate our payments from local currency into USD at time of settlement, which means that during periods of a strengthening U.S. dollar, our international receipts could be reduced. Our operating expenses are denominated in the currencies of the countries in which our operations are located, which are primarily in the U.S., China and Germany. Our consolidated results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates. In addition, as foreign currency exchange rates fluctuate, the translation of our international receipts into U.S. dollars affects the period-over-period comparability of our operating results and can result in foreign currency exchange gains and losses. To date, we have not entered into any hedging arrangements with respect to foreign currency risk or other derivative financial instruments, although we may choose to do so in the future. A hypothetical 10% increase or decrease in the relative value of the U.S. dollar to other currencies would not have a material effect on our operating results.

Inflation Risk

Inflationary factors such as increases in costs may adversely affect our results of operations. We do not believe that inflation has had a material effect on our business, financial condition or results of operations to date. If our costs were to become subject to significant inflationary pressures, we may not be able to

fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition or results of operations.

Item 4. Controls and Procedures

Limitations on Effectiveness of Controls and Procedures

Our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their desired objectives. Management does not expect, however, that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all error and fraud. Any control system, no matter how well designed and operated, is based upon certain assumptions and can provide only reasonable, not absolute, assurance that its objectives will be met. Further, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on that evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Quarterly Report on Form 10-Q to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms and (ii) accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, during the three months ended March 31, 2025 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Part II Other Information

Item 1. Legal Proceedings

From time to time we may be involved in claims and proceedings arising in the course of our business. The outcome of any such claims or proceedings, regardless of the merits, is inherently uncertain. We are not currently party to any material legal proceedings.

Item 1A. Risk Factors

The Company's risk factors are described in Part I, Item 1A, "Risk Factors" of the Annual Report on Form 10-K. These factors could materially adversely affect our business, financial condition, and results of operations, and could cause our actual results to differ materially from our historical results or the results contemplated by any forward-looking statements contained in this Quarterly Report on Form 10-Q. There have been no material changes from the risk factors previously disclosed under the heading "Risk Factors" in the Annual Report on Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

(a) None.

(b) Trading Plans

No "officer" (as defined in Rule 16a-1(f) under the Exchange Act) or director of the Company adopted, modified or terminated "Rule 10b5-1 trading arrangements" and/or "non-Rule 10b5-1 trading arrangements" (each as defined in Item 408 of Regulation S-K) during the three months ended March 31, 2025.

Item 6. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			Exhibit	Filed Herewith
		Form	File No.	Date		
3.1	Amended and Restated Certificate of Incorporation, as currently in effect	8-K	001-40653	7/30/2021	3.1	
3.2	Bylaws, as currently in effect	8-K	001-40653	12/08/2023	3.1	
31.1	Certification of Principal Executive Officer pursuant to Exchange Act Rule 13a-14(a)					X
31.2	Certification of Principal Financial Officer pursuant to Exchange Act Rule 13a-14(a)					X
32.1*	Certification of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350					X
101.INS	Inline XBRL Instance Document - the Instance Document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					X

*The certification attached as Exhibit 32.1 that accompanies this Quarterly Report on Form 10-Q pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, is not deemed "filed" by the Registrant for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

DUOLINGO, INC.

Date: May 1, 2025

By: /s/ Luis von Ahn
Luis von Ahn
Chief Executive Officer
(Principal Executive Officer)

Date: May 1, 2025

By: /s/ Matthew Skaruppa
Matthew Skaruppa
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Luis von Ahn, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Duolingo, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By:

Date: May 1, 2025

/s/ Luis von Ahn

Luis von Ahn

**President and Chief Executive Officer
(Principal Executive Officer)**

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Matthew Skaruppa, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Duolingo, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By:

Date: May 1, 2025

/s/ Matthew Skaruppa

Matthew Skaruppa

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Duolingo, Inc. (the “Company”) for the quarter ended March 31, 2025 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Luis von Ahn, President and Chief Executive Officer of the Company, and Matthew Skaruppa, Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 1, 2025

/s/ Luis von Ahn

Luis von Ahn

President and Chief Executive Officer

(Principal Executive Officer)

Date: May 1, 2025

/s/ Matthew Skaruppa

Matthew Skaruppa

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)