Users

Plotly
(Graphing
Software)

Node Server → Hosting → React Website

Stock Prices
Stock Charts

Requests
Stock prices

Finnhub.io
(Stock API)

user data, news | user inputs

NewsAPI.com
(Business News API) → News → Flask Server

Stock Prices

user data and
transaction
information

MySQL Database

This finalized mental model encapsulates all of the different components in our Investment Trainer web application. A node server is used to host the web application on the front end, and when a user logs in to the React website, their login information is verified with our backend flask and MySQL database servers, which are used for storing login information and transaction data.

When a user wants to look up or buy a stock, those requests are made to the stock API (Finnhub.io) and sent back to the React server, and then a stock graph is generated using the graph API (plotly.com/python) using the stock data sent from our stock API.

Lastly, when a user goes to the news tab, multiple news articles related to business and stocks are generated using the news API (NewsAPI.com).