

Objective: Collect names and the exchanges stock tickers are sold on so we can later go back and input option spread data for each equity. This is the first step in our plan to use branching processes in order to create statistical models for empirical data. We first must get equity names in order to use a different url endpoint later and match options data to their respective stock ticker.

- Data sources: polygon.io API (free tier)
- Data types: stock ticker, stock name, equity market, locale (country the stock is from), primary exchange (exchange the stock is mostly sold on)
- Geographic Scope: US listed stock equities
- Time Range: This data is real-time reference data, and is not historical within a specific time period. This means it is grabbing stock ticker names that are listed on public exchanges at the time of data collection, so today (September 30th, 2025). However, this API can be used to grab options contracts price, greeks, and spreads at all times down to the millisecond. If I want to grab some of this options data in the future I will need to specify the beginning and end time over the time interval, as well as the frequency the spreads were taken (ex: every 5 seconds/ 2 minutes/ 7 days/ etc.)