# RISE Project Update

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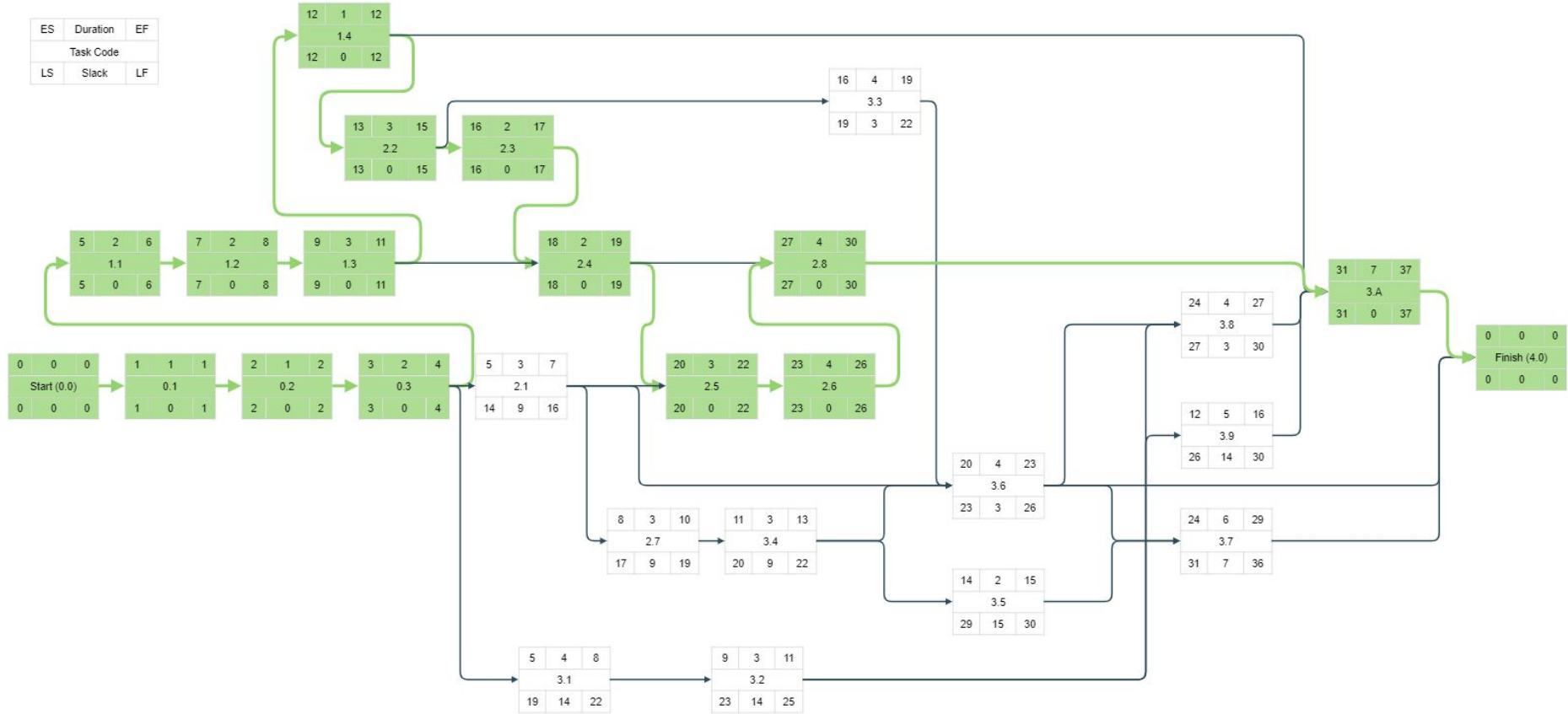Skylar Homan, Anoop Krishnadas

# Requirements

- APIs
  - Currently using **AlphaVantage** Free Stock Market API
  - Contacting Bloomberg (through Zarb School of Business) for alternative data feed
- Three areas to pull request from
  - Core Time Series Stock Data APIs
  - Company Overview - Fundamental Data
  - News and Sentiment - Alpha Intelligence
- UI
  - **Static version outlined** using CSS Flexbox
  - Major elements given class and ID tags for targeting in JS scripts
- Database
  - New stock data has been tested for being uploaded to a database
  - Ticker symbol database has not been created yet

# Scheduling

1. START (0.0)

2. Team Organization (0.1 - 0.3)

3. API Testing (1.1 - 1.4)

4. Interpreting JSONs (2.2 - 2.4)

5. Database Creation (2.1, 2.5 - 2.8, 3.4)

6. Website Outlining (3.1 - 3.4)

7. Backend => Frontend (3.5 - 3.8)

8. Additional Features (3.9)

9. Error Handling/Edits (1.4, 2.8, 3.7, 3.A)

10. FINISH (4.0)

Legend:

| ES | Duration | EF |
|---|---|---|
| | Task Code | |
| LS | Slack | LF |

Nodes:

| ES | Duration | EF | Task Code | LS | Slack | LF |
|---|---|---|---|---|---|---|
| 0 | 0 | 0 | Start (0.0) | 0 | 0 | 0 |
| 1 | 1 | 1 | 0.1 | 1 | 0 | 1 |
| 2 | 1 | 2 | 0.2 | 2 | 0 | 2 |
| 3 | 2 | 4 | 0.3 | 3 | 0 | 4 |
| 5 | 2 | 6 | 1.1 | 5 | 0 | 6 |
| 7 | 2 | 8 | 1.2 | 7 | 0 | 8 |
| 9 | 3 | 11 | 1.3 | 9 | 0 | 11 |
| 12 | 1 | 12 | 1.4 | 12 | 0 | 12 |
| 5 | 3 | 7 | 2.1 | 14 | 9 | 16 |
| 13 | 3 | 15 | 2.2 | 13 | 0 | 15 |
| 16 | 2 | 17 | 2.3 | 16 | 0 | 17 |
| 18 | 2 | 19 | 2.4 | 18 | 0 | 19 |
| 20 | 3 | 22 | 2.5 | 20 | 0 | 22 |
| 23 | 4 | 26 | 2.6 | 23 | 0 | 26 |
| 8 | 3 | 10 | 2.7 | 17 | 9 | 19 |
| 27 | 4 | 30 | 2.8 | 27 | 0 | 30 |
| 16 | 4 | 19 | 3.3 | 19 | 3 | 22 |
| 5 | 4 | 8 | 3.1 | 19 | 14 | 22 |
| 9 | 3 | 11 | 3.2 | 23 | 14 | 25 |
| 11 | 3 | 13 | 3.4 | 20 | 9 | 22 |
| 14 | 2 | 15 | 3.5 | 29 | 15 | 30 |
| 20 | 4 | 23 | 3.6 | 23 | 3 | 26 |
| 24 | 6 | 29 | 3.7 | 31 | 7 | 36 |
| 24 | 4 | 27 | 3.8 | 27 | 3 | 30 |
| 12 | 5 | 16 | 3.9 | 26 | 14 | 30 |
| 31 | 7 | 37 | 3.A | 31 | 0 | 37 |
| 0 | 0 | 0 | Finish (4.0) | 0 | 0 | 0 |

# Major Risks Encountered

- API Selection and Management is the largest risk of the project, as all other operations rely on it
- Initially, IEX Cloud was selected
  - Their Student Package offered sufficient request speed and hourly request limits according to the Requirements Specification
  - The Student Package was **removed mid-testing**, meaning our progress regressed
- Solution:
  - By contacting several resources, including Dr. Jeffreys and the other Stock Data Team, we were able to find **AlphaVantage** API
  - We are awaiting a response from AlphaVantage regarding the potential expansion of our API Key, as the free plan is limited to 100 requests per day
  - If no response is received from AlphaVantage, alternative APIs are being investigated concurrently, primarily Bloomberg's Stock Data API

# Progress Against Our Project Plan

Total Duration Passed: 16 work-days

Expected Task Position on Critical Path: 2.3

Current Task Position on Critical Path: 2.2

Solution:
- API is a necessary part of the project, so excess features may be cut from other areas
- More manpower will be provided to the tasks 2.2 - 2.6

Completed Tasks:
- 0: 0.1, 0.2, 0.3
- 1: 1.1, 1.2, 1.3, 1.4
- 2: 2.1
- 3: 3.1, 3.2, 3.3

# Prototypes

| | |
|---|---|
| Logo Image | Here is some sample text in the search bar area. |

Description Page/Popup | Contact Page/Popup | Account Popup

## Apple Inc [$AAPL] -- Share Price -- Profit/Loss

Date/Time

| Stock #1 | Stock Price |
|---|---|
| Stock #2 | Stock Price |
| Stock #3 | Stock Price |
| Stock #4 | Stock Price |
| Stock #5 | Stock Price |
| Stock #6 | Stock Price |
| Stock #7 | Stock Price |
| Stock #8 | Stock Price |

Main Graph Display

Today

1 Week

1 Month

3 Months

1 Year

Stock Name:
Apple Inc - AAPL

Market Open:
$117.35

Daily High:
$123.47

Daily Low:
$115.66

Article #1
Image
of
Article
#1

Article #2
Image
of
Article
#2

Here is some sample text for the footer area. It is to test element sizing.