1. Project Scope:

The OptionChart will display a chart of a stock. The application will utilize the api provided by Tradier.

2. Functional Objectives:

a. High Priority

Provide a price chart for a given stock.

Validate that it is a valid stock

Display an option chart for a given stock

Provide basic information of the stock

-Ticker

Build as command line application

b. Medium Priority

Upgrade to standalone application

Create a GUI

Aesthetics upgrade

When daily gain is positive, make the color theme green and negative, the theme red.

Make the cursor of the chart a rocket ship

c. Low Priority

Upgrade to web based application
Implement technical indicators and other analysis
Implement saving of a portfolio.

3. Use Case Descriptions

| Use Case Name: | Looking up a stock and option chain |
|------------------|---|
| Summary: | The user will be able to input a stock ticker resulting in a chart of the stock with basic information displayed. The user also requests the option chain. |
| Basic Flow | The application displays instructions User inputs a stock The application validates the input. The application requests the stock data from the api The application displays the data to the reader. The user also requests an option chain with a specific date (default closest date. The application requests the option chain with the given date The application displays the option chain. |
| Alternative Flow | Step 3: If the input message is to quit, quit. Step 3: If the input is invalid, display an error message Step 4: If the request failed, display an error message Step 6: If the request failed, display an error message |
| Preconditions | The application is running |
| Postconditions | The application returns to Step 1 |
| Business Rules | The ticker name contains only alphabetic characters. |