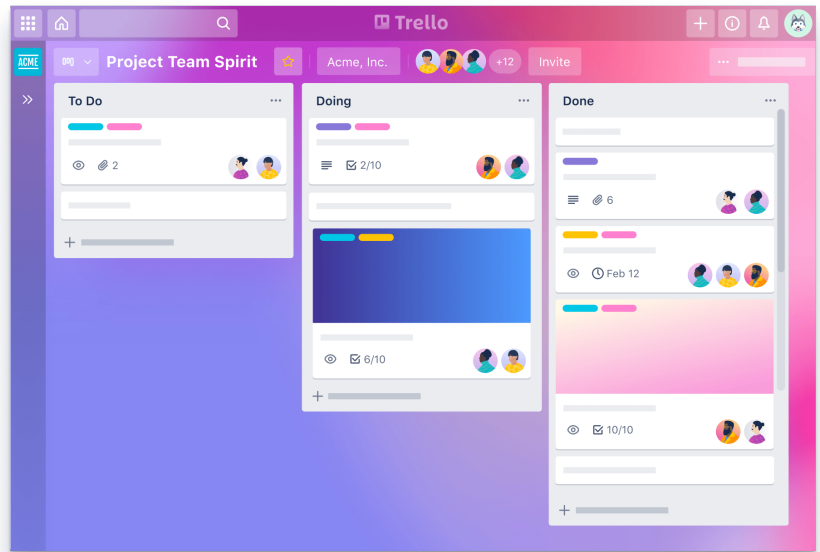# Activities

Create a trello board to assign and manage timeline of tasks

A trello board (Image on right) is an online kanban board tool, which acts as a management system which allows multiple team members to **break each component of a large project into smaller tasks**. In addition it allows for features such as **assigning tasks to people, setting due date for tasks**, etc. Overall this activity would allow us to efficiently divide and manage tasks to reach our deadline.

Pseudocode
The purpose of pseudocode is to determine how you would implement certain functionality at a high level so you know how you would implement it when you set out to code it. We would need to complete **pseudocode for the senator script which outlines how we receive the data and how we would input it to our database**.

Entity Relationship Diagram(ERD)
An entity relation diagram is a graphical representation that shows relationships between the content of relational database. In our case we want to show the relationship between the information we are scraping from the government database.

Implement git version control to more efficiently collaborate
Git version control allows multiple versions of the same code with everyone's changes and versions of the code tracked. This would allow us to revert code to older states if someone were to add code that would cause errors to the program.

Developing the REST Application Programming Interface(API)
A REST API is an application programming interface that conforms to the constraints of REST architectural style. REST is a set of architectural constraints, and developers can implement it in a variety of ways. This information can be delivered in many ways but we prefer to send it using JSON, due to the abilities of parsing JSON really easily through JavaScript and Python. We will implement this REST API through the use of Django, Django is a python web framework that enables for rapid development and makes it really easy to for developers collaborate; furthermore it's well known for helping developers avoid many security issues that we might run into later making it an optimal option. While developing this REST API we also hope to develop documentation on how to retrieve each piece of data and a description regarding each piece of data.

Data Analysis

Data Analysis will be done to show relationships between senator stock transactions and price action of the stock. We hope to use python alongside many libraries such as pandas, matplotlib etc. Furthermore we hope to create these data analysis scripts on a tool called jupyter notebook. Jupyter Notebook is an open-source web application that allows data scientists to create and publish documents that integrate live scripts, equations, visualizations and much more. We believe that it is the best tool to analyze the data retrieved from the API.

UI/UX Design Prototype

User Interface and User Experience design are crucial to a product and work closely together. User Experience is a human-first way of designing products and services, it's main focus is making everything easier for the user. While User Interface is to design a visual of how the product is going to look like and work, this will be really helpful when first starting off to develop. We plan on using Figma to achieve this, Figma is a great tool for completing UI/UX related tasks and is used in an enterprise level.

Data Visualization

After achieving our minimum viable product and completing a UI/UX design, we hope to visualize our data through the use of a web app. We believe that visualizing that data for our project is a key component. Our product vision entails us to build a platform that make this information available to the public and format it in a manner that is much better then the original PDF source. Thus, we came to the conclusion that a website is the best way to do so. To develop the website we hope to use a javascript framework named React.JS, we believe that React.JS is the optimal choice for this project due to it's reusable components features and the ability to transfer it into a mobile application in the future.