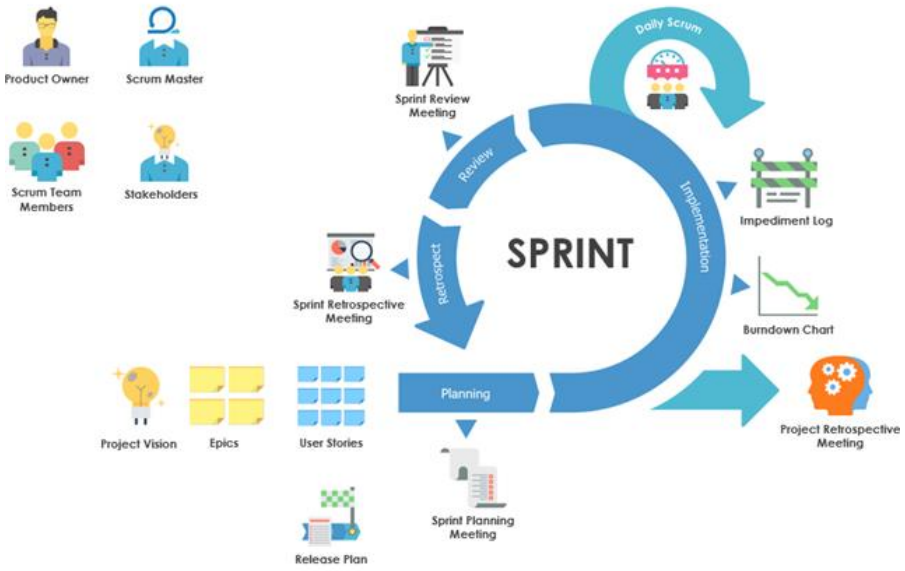
PROJECT PLAN
STOCK PRICE PREDICTOR

Team Details:

MIHIR JAYAPRKASH	PES2UG20CS196
MITUL JOBY	PES2UG20CS199
NAVYAE GOYAL	PES2UG20CS219
NOEL JACOB ABRAHAM	PES2UG20CS234

1. Identify the lifecycle to be followed for the execution of your project and justify why you have chosen the model.

The life cycle followed for the execution of our project is the Agile Scrum. This methodologyinvolves multiple iterations of certain steps and a daily scrum to update each other on the progress.
These iterations are the sprints and are pre decided before starting the project. We follow a continuous deliverable format which verifies tasks for the day and if the sprint completion is up to date.



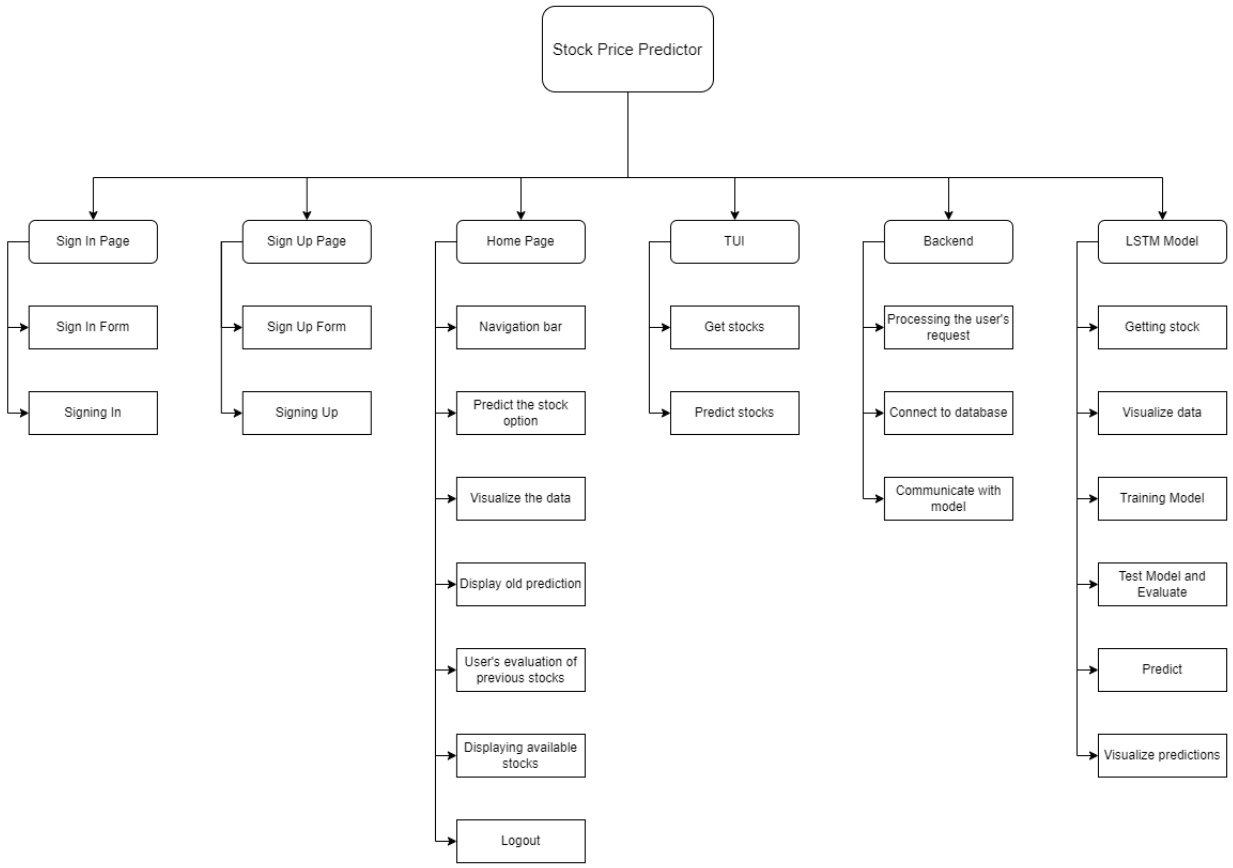
2. Identify the tools which you want to use throughout the life cycle like planning tool, design tool, version control, development tool, bug tracking and testing.

Planning tool: JIRA
Design Tools: PowerPoint, Canva
Version Control: git
Development Tool: VS Code, Python
Bug Tracking: JIRA
Testing: Selenium

3. Determine all the deliverables and categorize them as reuse/build components and justify the same

- Login Page (Client, Admin): Reuse
  There are many existing login page components that we can use and change to our requirements.
- Update the databases with companies' stock: Build
- Try to add as many companies' stock prices to the database: Build
  A simple process of adding data to an existing database and connecting them
- Generate plots for historical stock prices: Build
  Deliverable that takes care of generating historical data such as closing price, opening price, high and low and then based on that prints the stock prices.
- Generate future prices of the stock: Build
  Generating the future prices of the stock using machine learning.

4. Create a WBS for the entire functionalities in detail



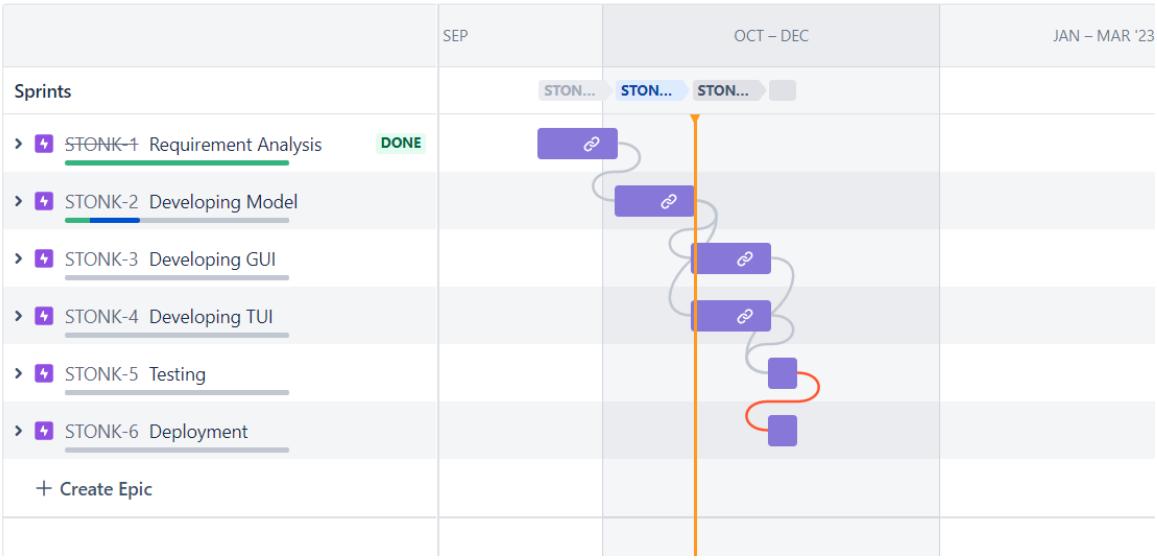
Rough estimate of effort required

Organic models are used when the problem statement is well understood and have been used in the past, and works well with small teams. The module selected for testing was the LSTM model. This model was selected because it is the core module and is a dependency for other modules.

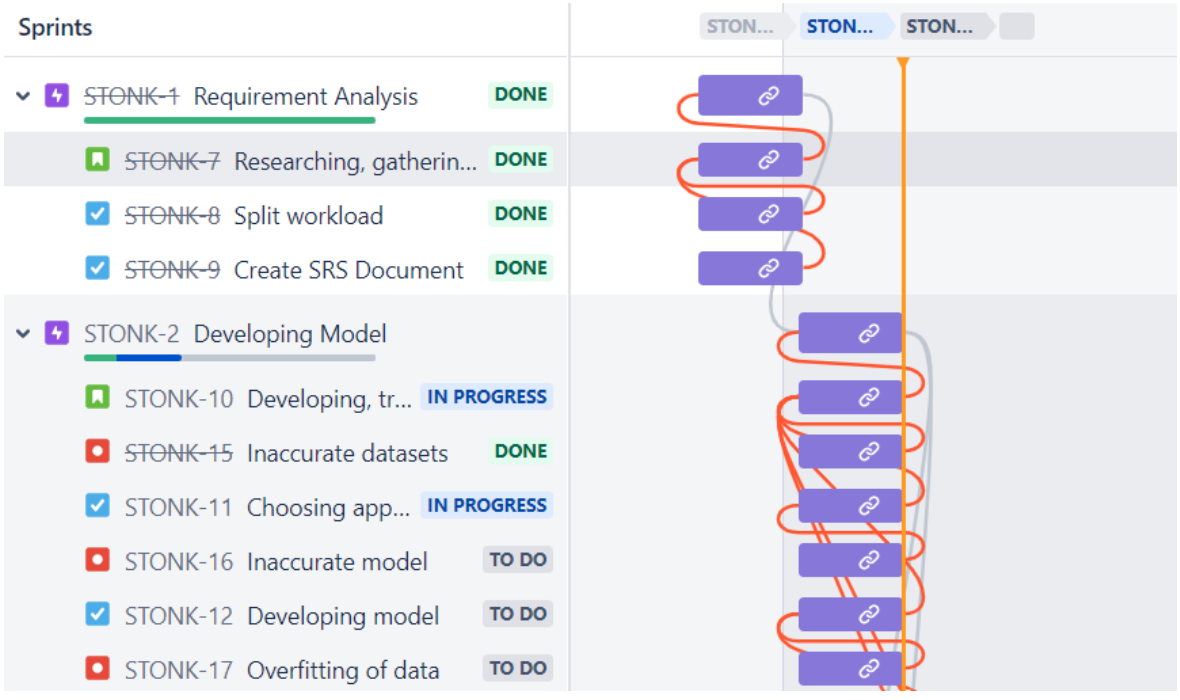
KLOC = 2
a = 2.4
b = 1.05

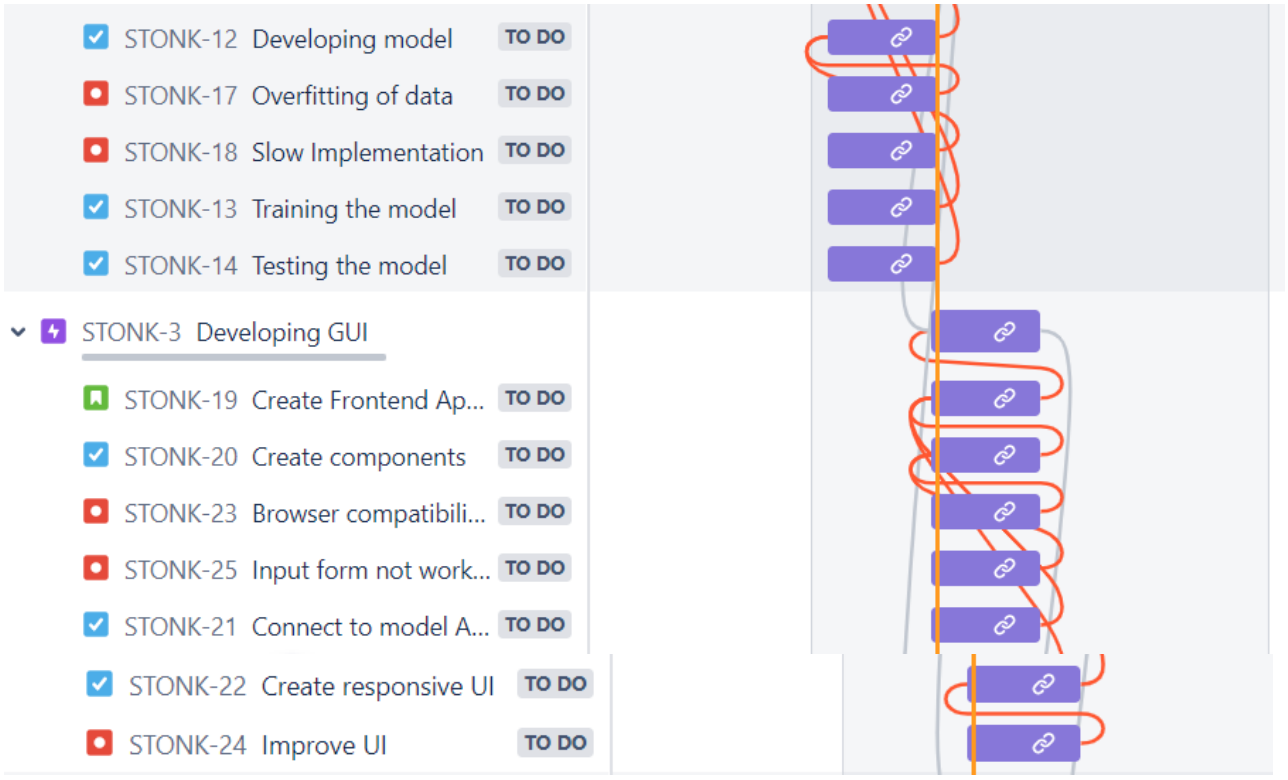
Effort = a*(KLOC)^b = 4.96

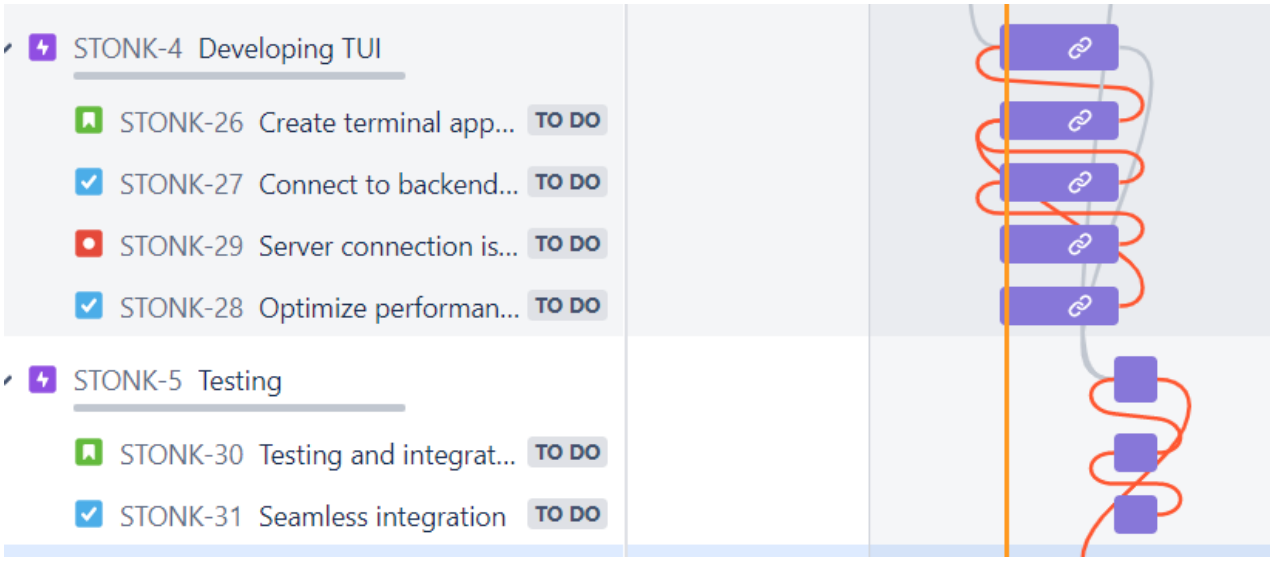
Gantt chart

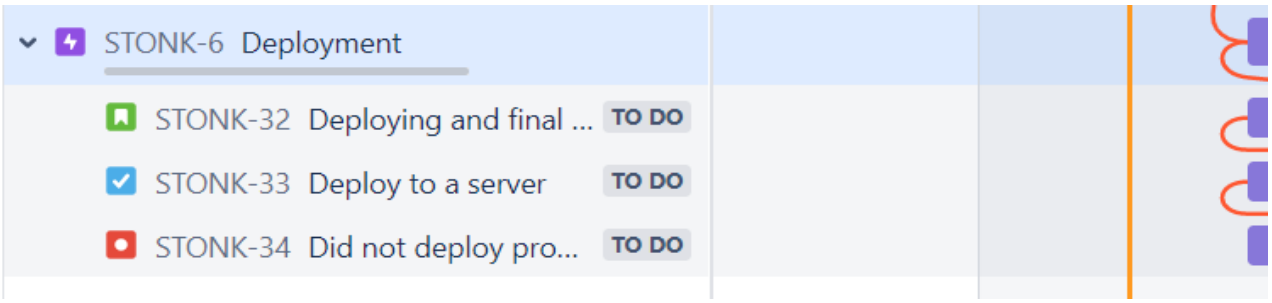


Sprints




STONK-12 Developing model TO DO
STONK-17 Overfitting of data TO DO
STONK-18 Slow Implementation TO DO
STONK-13 Training the model TO DO
STONK-14 Testing the model TO DO
STONK-3 Developing GUI
STONK-19 Create Frontend Ap... TO DO
STONK-20 Create components TO DO
STONK-23 Browser compatibili... TO DO
STONK-25 Input form not work... TO DO
STONK-21 Connect to model A... TO DO
STONK-22 Create responsive UI TO DO
STONK-24 Improve UI TO DO


STONK-4 Developing TUI
STONK-26 Create terminal app... TO DO
STONK-27 Connect to backend... TO DO
STONK-29 Server connection is... TO DO
STONK-28 Optimize performan... TO DO
STONK-5 Testing
STONK-30 Testing and integrat... TO DO
STONK-31 Seamless integration TO DO


STONK-6 Deployment
STONK-32 Deploying and final ... TO DO
STONK-33 Deploy to a server TO DO
STONK-34 Did not deploy pro... TO DO

Product Backlog