# PROJECT PLAN
STOCK PRICE PREDICTOR

Team Details:

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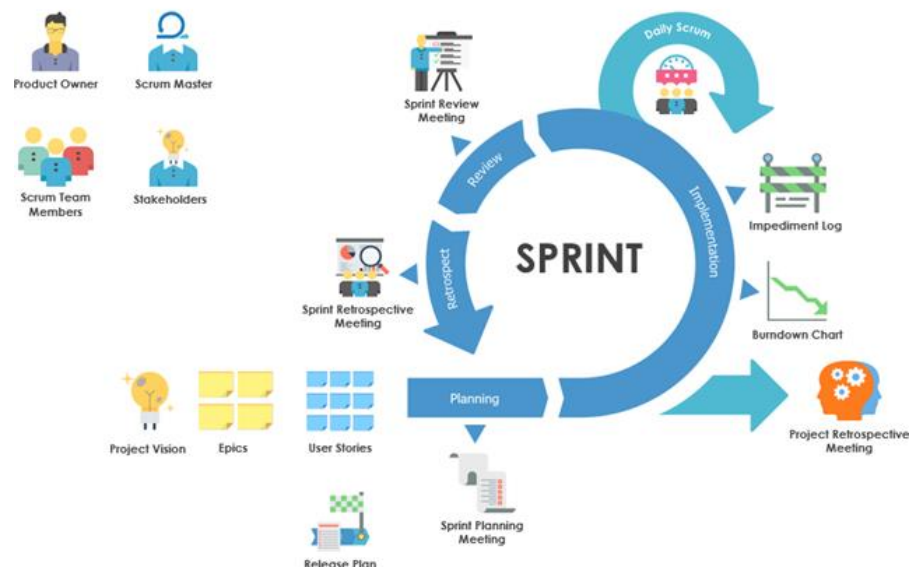
2. Identify the tools which you want to use throughout the life cycle like planning tool, design tool, version control, development tool, bug tracking and testing.

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.
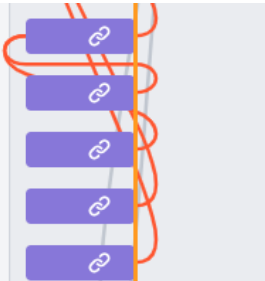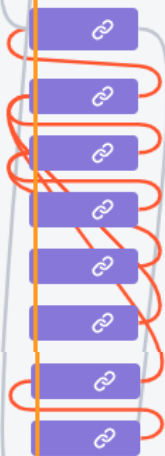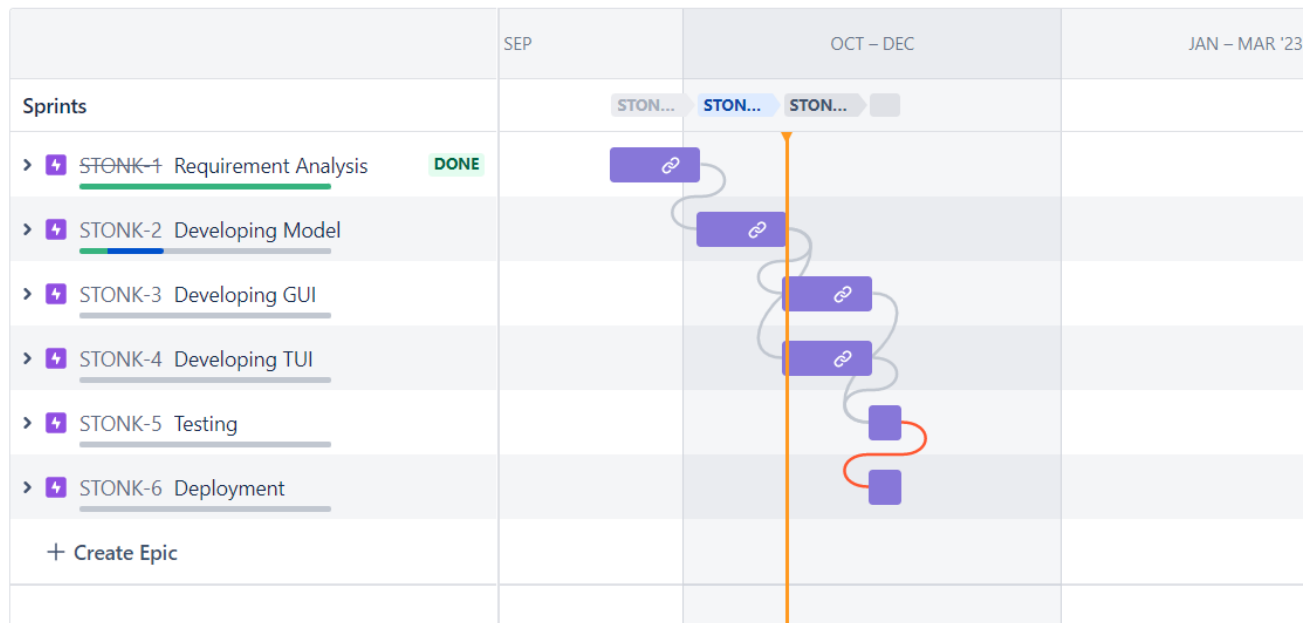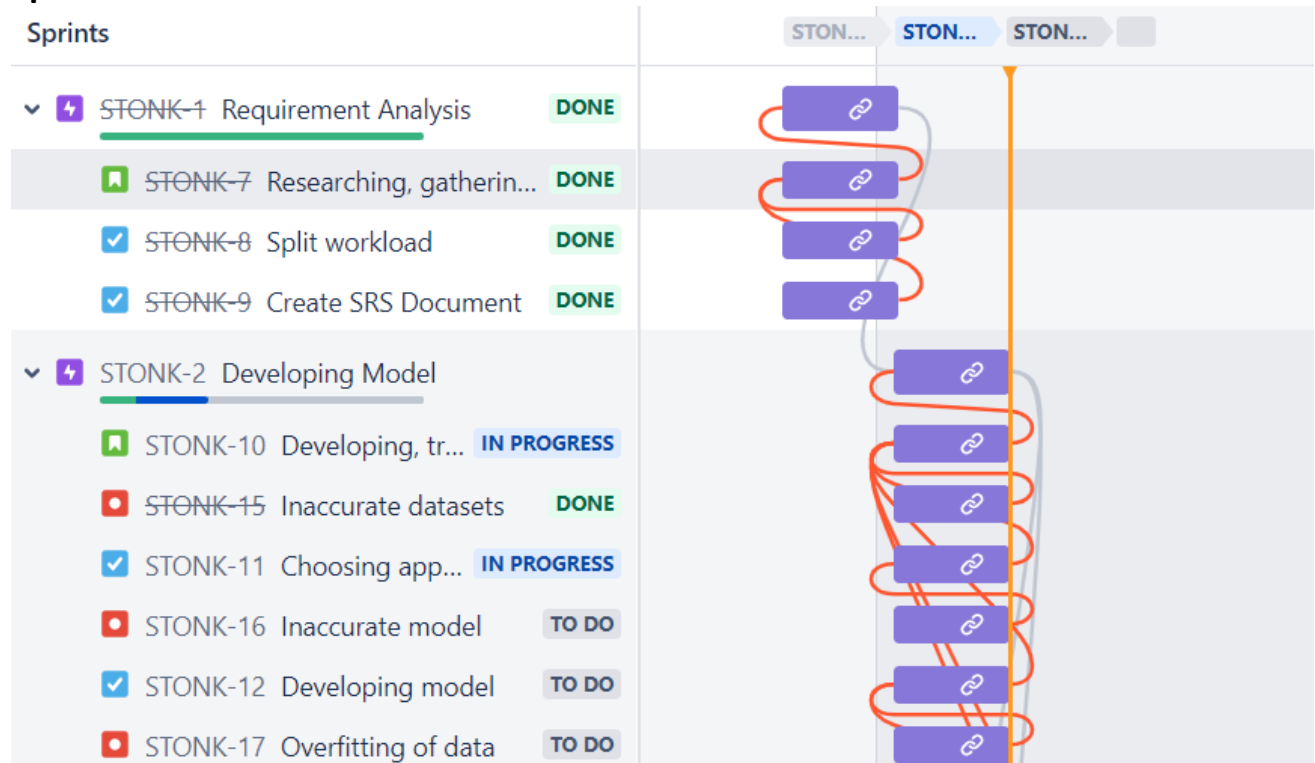
KLOC = 2
a = 2.4
b = 1.05

Effort = a*(KLOC)^b = 4.96

Gantt chart
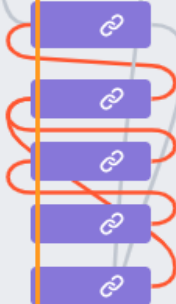
Sprints	SEP	OCT – DEC	JAN – MAR '23
		STON... STON... STON...	
> ⚡ ~~STONK-1~~ Requirement Analysis **DONE**	🔗		
> ⚡ STONK-2 Developing Model		🔗	
> ⚡ STONK-3 Developing GUI		🔗	
> ⚡ STONK-4 Developing TUI		🔗	
> ⚡ STONK-5 Testing			
> ⚡ STONK-6 Deployment			
+ Create Epic			

Sprints

Sprints		
	STON... STON... STON...	
∨ ⚡ ~~STONK-1~~ Requirement Analysis **DONE**	🔗	
⤷ 🔖 ~~STONK-7~~ Researching, gatherin... **DONE**	🔗	
☑ ~~STONK-8~~ Split workload **DONE**	🔗	
☑ ~~STONK-9~~ Create SRS Document **DONE**	🔗	
∨ ⚡ STONK-2 Developing Model	🔗	
🔖 STONK-10 Developing, tr... **IN PROGRESS**	🔗	
🟥 ~~STONK-15~~ Inaccurate datasets **DONE**	🔗	
☑ STONK-11 Choosing app... **IN PROGRESS**	🔗	
🟥 STONK-16 Inaccurate model **TO DO**	🔗	
☑ STONK-12 Developing model **TO DO**	🔗	
🟥 STONK-17 Overfitting of data **TO DO**	🔗	

- ☑ 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

STONK Sprint 2 4 Oct – 25 Oct (9 issues)   0 0 0   Complete sprint ...

🔖	STONK-10	Developing, training and testing the model	DEVELOPING MODEL	IN PROGRESS ⌄
🟥	STONK-15	Inaccurate datasets	DEVELOPING MODEL	DONE ⌄
✅	STONK-11	Choosing appropriate model	DEVELOPING MODEL	IN PROGRESS ⌄
🟥	STONK-16	Inaccurate model	DEVELOPING MODEL	TO DO ⌄
✅	STONK-12	Developing model	DEVELOPING MODEL	TO DO ⌄
🟥	STONK-17	Overfitting of data	DEVELOPING MODEL	TO DO ⌄
🟥	STONK-18	Slow Implementation	DEVELOPING MODEL	TO DO ⌄
✅	STONK-13	Training the model	DEVELOPING MODEL	TO DO ⌄
✅	STONK-14	Testing the model	DEVELOPING MODEL	TO DO ⌄

+ Create issue

STONK Sprint 3 25 Oct – 15 Nov (11 issues)   0 0 0   Start sprint ...

🔖	STONK-19	Create Frontend Application	DEVELOPING GUI	TO DO ⌄
✅	STONK-20	Create components	DEVELOPING GUI	TO DO ⌄
🟥	STONK-23	Browser compatibility issues	DEVELOPING GUI	TO DO ⌄
🟥	STONK-25	Input form not working	DEVELOPING GUI	TO DO ⌄
✅	STONK-21	Connect to model API	DEVELOPING GUI	TO DO ⌄
✅	STONK-22	Create responsive UI	DEVELOPING GUI	TO DO ⌄
🟥	STONK-24	Improve UI	DEVELOPING GUI	TO DO ⌄
🔖	STONK-26	Create terminal application	DEVELOPING TUI	TO DO ⌄
✅	STONK-27	Connect to backend server	DEVELOPING TUI	TO DO ⌄
🟥	STONK-29	Server connection issues	DEVELOPING TUI	TO DO ⌄
✅	STONK-28	Optimize performance	DEVELOPING TUI	TO DO ⌄

+ Create issue

💡 Quickstart ✕

STONK Sprint 4 15 Nov – 22 Nov (5 issues)   0 0 0   Start sprint ...

🔖	STONK-30	Testing and integrating	TESTING	TO DO ⌄
✅	STONK-31	Seamless integration	TESTING	TO DO ⌄
🔖	STONK-32	Deploying and final checks	DEPLOYMENT	TO DO ⌄
✅	STONK-33	Deploy to a server	DEPLOYMENT	TO DO ⌄
🟥	STONK-34	Did not deploy properly	DEPLOYMENT	TO DO ⌄

+ Create issue