Project Planning Phase
Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	4 November 2023
Team ID	Team-592006
Project Name	FetalAI: USING MACHINE LEARNING TO PREDICT AND MONITOR FETAL HEALTH
Maximum Marks	20 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Project setup & Infrastructure	USN-1	Set up the development environment with the required tools and frameworks to start the Fetal Health Monitoring Project.	1	High	Varshitha
Sprint-1	development environment	USN-2	Collect a diverse dataset of fetal health records and associated maternal health data for training the deep learning model.	2	High	Radha
Sprint-2	Data collection	USN-3	Preprocess the collected dataset by handling missing values, normalizing features, and ensuring data quality before splitting it into training and validation sets.	2	High	Siddartha
Sprint-2	data preprocessing	USN-4	Explore various deep learning algorithms (e.g., CNNs) and models suitable for predicting fetal health based on the preprocessed dataset.	3	High	Thanush
Sprint-3	model development	USN-5	Train the selected deep learning model using the preprocessed dataset and monitor its performance on the validation set.	4	High	Siddartha
Sprint-3	Training	USN-6	Implement anomaly detection techniques to identify potential risks or abnormalities in fetal health monitoring data.	6	medium	Varshitha
Sprint-4	model deployment &Integration	USN-7	Deploy the trained machine learning model as an API or service to enable integration with existing healthcare systems for continuous fetal health monitoring.	1	medium	Radha
Sprint-5	Testing & quality assurance	USN-8	Conduct extensive testing and validation of the machine learning model's predictions and the user interface's functionality to ensure accuracy and reliability.	1	medium	Thanush

Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	3	3 Days	1 Nov 2023	3 Nov 2023	20	3 Nov 2023
Sprint-2	5	5 Days	4 Nov 2023	8 Nov 2023		
Sprint-3	10	7 Days	9 Nov 2023	15 Nov 2023		
Sprint-4	1	7 Days	16 Nov 2023	19 Nov 2023		
Sprint-5	1	3 Days	19 Nov 2023	21 Nov 2023		

Velocity:

Imagine we have a 25-days sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

AV= 25/20 = 1.25

Burndown Chart:

A burndown chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/
https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:
https://www.atlassian.com/agile/project-management
https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software
https://www.atlassian.com/agile/tutorials/epics
https://www.atlassian.com/agile/tutorials/sprints
https://www.atlassian.com/agile/project-management/estimation
https://www.atlassian.com/agile/tutorials/burndown-charts

Burndown Chart:

Board section.

We have completed sprint 1 and 2. So we can see the remaining tasks on board.

Backlog section

Timeline