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

Team ID	PNT2022TMID52612
Project Name	Project - Detecting Parkinson's Disease Using Machine Learning
Maximum Marks	8 Marks

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

The below template shows the product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Upload Images	USN-1	As a user, I can upload the images in the website in order to obtain the prediction result of parkinson's disease	2	High	1.Anantha Ramanujan S M 2.Aditya Damodhar D 3.Shyam Sivasubramanian 4.Tharun R Ragav
Sprint-4	Test Vital Page	USN-2	As a user, I will get the prediction result and accuracy on the test vital page.	3	High	1.Anantha Ramanujan S M 2.Aditya Damodhar D 3.Shyam Sivasubramanian 4.Tharun R Ragav

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Dashboard	USN-3	Dashboard displays the symptoms, causes and medications for the Parkinson disease	2	Low	1.Anantha Ramanujan S M 2.Aditya Damodhar D 3.Shyam Sivasubramanian 4.Tharun R Ragav
Sprint-1	Data Collection	USN-4	As an Administrator, I need to collect data (images of spirals and waves drawn by healthy people and Parkinson's patients).	2	High	1.Anantha Ramanujan S M 2.Aditya Damodhar D 3.Shyam Sivasubramanian 4.Tharun R Ragav
Sprint-1	Data Pre-Processing	USN-5	As an Administrator, I should clean my data and prepare it for model building by doing pre-processing activities such as resizing, visualizing the dataset and converting from RGB to grayscale	2	High	1.Anantha Ramanujan S M 2.Aditya Damodhar D 3.Shyam Sivasubramanian 4.Tharun R Ragav
Sprint-2	Model Building	USN-6	As an Administrator, I need to build the model using Random Forest Classifier for spiral images and Convolutional Neural Networks (CNN) for wave images	3	High	1.Anantha Ramanujan S M 2.Aditya Damodhar D 3.Shyam Sivasubramanian 4.Tharun R Ragav

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Deployment of Model	USN-7	As an Administrator, I	2	Medium	1.Anantha Ramanujan S M

			need to deploy the Machine Learning model that was built.			2.Aditya Damodhar D 3.Shyam Sivasubramanian 4.Tharun R Ragav
Sprint-3	Building Frontend of the application	USN-8	As an Administrator, I need to build the website for the application using HTML, CSS etc.	2	High	1.Anantha Ramanujan S M 2.Aditya Damodhar D 3.Shyam Sivasubramanian 4.Tharun R Ragav
Sprint-4	Connecting the ML model, Frontend and Backend	USN-9	As an Administrator, I can integrate the deployed model and web application using python flask server.	3	High	1.Anantha Ramanujan S M 2.Aditya Damodhar D 3.Shyam Sivasubramanian 4.Tharun R Ragav

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	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	14 Nov 2022

Velocity:

For example, imagine we have a 10-day 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)

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

In our project, we have a 6-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)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{6} = 3.3$$

Burndown Chart:

A burn down 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.

A burndown chart is almost a "must" have tool for a Scrum Team for the following main reasons:

- monitoring the project scope creep
- Keeping the team running on schedule
- Comparing the planned work against the team progression