

Project Planning Phase

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

Date	21 October 2022
Team ID	PNT2022TMID00148
Project Name	Project - Detecting Parkinson's Disease using Machine Learning
Maximum Marks	8 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	Viewing Home Page for the web application	USN-1	As a user, I can view the home page which has a description of the disease as well as options to sign up or log in.	4	Low	Priyanka Nivetta Punithmathi Midhuna
Sprint-1	Sign Up Page	USN-2	As a user, I can register for the application by entering my name, phone number, email, password, and confirming my password.	4	High	Priyanka Nivetta Punithmathi Midhuna
Sprint-1	Login	USN-3	As a user, I can log into the application by entering email & password after creation of the account.	2	High	Priyanka Nivetta Punithmathi Midhuna
Sprint-2	Authorization	USN-4	As a user, I will receive confirmation email once I have registered for the application.	6	High	Priyanka Nivetta Punithmathi Midhuna
Sprint-2	Dashboard	USN-5	As a user, I can research and know the sample disease images of Parkinson. Also collecting sample data to learn more about the disease.	6	High	Priyanka Nivetta Punithmathi Midhuna

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Data Collection (Dataset)	USN-6	I need to collect data (images of spirals and waves drawn by healthy people and Parkinson's patients).	6	Medium	Priyanka Nivetta Punithmathi Midhuna
Sprint-2	Data checking	USN-7	I need to learn and understand the data	2	Medium	Priyanka Nivetta Punithmathi Midhuna
Sprint-3	Data Pre-Processing and EDA	USN-8	I need to prepare, clean the data, and process the data for modelbuilding by doing pre-processing activities such as EDA and data visualization.	4	High	Priyanka Nivetta Punithmathi Midhuna
Sprint-3	Data visualization	USN-9	I need to visualize the data for to check for any outliers and processing the data accordingly.	7	Medium	Priyanka Nivetta Punithmathi Midhuna
Sprint-3	Model Building (Training and testing)	USN-10	I need to build the model using Data mining processes such as Random ForestClassifier, K Nearest Neighbor (KNN) from regression, classification, and clustering techniques.	4	High	Priyanka Nivetta Punithmathi Midhuna
Sprint-3	Assessing the model using metrics	USN-11	I need to measure the performance of the model using regression metrics	5	Medium	Priyanka Nivetta Punithmathi Midhuna
Sprint-4	Application Building	USN-12	I need to build the website for the model application using HTML, CSS, JavaScript etc followed by user sign up page creation in sprint 1. It is then completed by designing the application website.	4	Medium	Priyanka Nivetta Punithmathi Midhuna

Sprint-4	Model verification	USN-13	I need to check that model works fine in the application for the user.	6	High	Priyanka Nivetta Punithmathi Midhuna
Sprint-4	Model Deployment (IBM Cloud)	USN-14	I need to deploy the Machine Learning model that was built using cloud environment from IBM. And configuring the data of the user in IBM warehouse service called as db2.	5	Medium	Priyanka Nivetta Punithmathi Midhuna
Sprint-4	Results	USN-15	As a user, I can receive a diagnosis in addition to recommendations on what I should do now.	5	High	Priyanka Nivetta Punithmathi Midhuna

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	10	6 Days	24 Oct 2022	29 Oct 2022	10	29 Oct 2022

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-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	19 Nov 2022

Velocity:

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

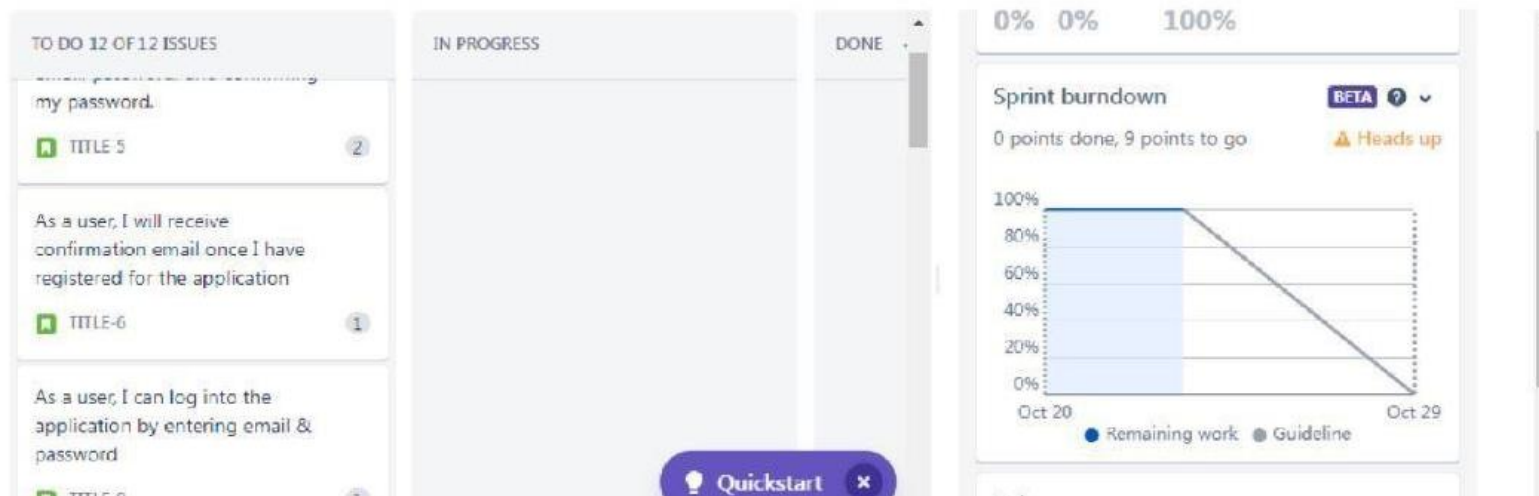
Sprint 1 -> AV = sprint duration/ velocity = 10/6 = 1.667

Sprint 2 -> AV = sprint duration/velocity = 20/6 = 3.333

Sprint 3 -> AV = sprint duration/velocity = 20/6 = 3.333

Sprint 4-> AV = sprint duration/velocity = 20/6 = 3.333

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.

<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>