Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID36002
Project Name	Early Detection of Chronic Kidney 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	Data Collection	Task-1	To build the machine learning model, we begin with the process of downloading the dataset and then perform data analysis	4	Low	Sandhya S
Sprint-1	Data Analysis	Task-2	We import the required libraries and then perform data analysis on the given dataset.	3	Medium	Nithyakamal Ilamurugu
Sprint-1	Data Pre-processing	Task-3	Data cleaning, handling missing values and performing label encoding.	8	Medium	Gnanavarshini M
Sprint-1	Building Login Page	USN-1	As a user, I can log into the application through a mail and password	5	High	Pooja Balasubramanian
Sprint-2	Register Page	USN-2	As a new user, I can register for the application through email.	5	High	Sanjay Kannan M
Sprint-2	Splitting the dataset	Task-4	Splitting dataset into train and test split.	3	Medium	Gnanavarshini M
Sprint-2	Building the Model	Task-5	Build three different ML models for classification and prediction.	12	High	Sandhya S Nithyakamal Ilamurugu
Sprint-3	Home Page	USN-3	As a user, I can view the symptoms of CKD and test vitals required for its prediction.	5	Medium	Gnanavarshini M
Sprint-3	Comparing different ML Models	Task-6	Evaluating each model and choosing the one with better accuracy.	3	Low	Pooja Balasubramanian

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Creating User Database	Task-7	Storing the user login details in the database.	12	High	Sandhya S Sanjay Kannan M
Sprint-4	Prediction Page	USN-4	As a user, I can view the test results.	5	Low	Sanjay Kannan M
Sprint-4	Train model on IBM Cloud	Task-8	Train the ML model on IBM Watson.	7	Medium	Nithyakamal Ilamurugu
Sprint-4	Flask Integration	Task-9	Integrating the HTML files with the ML model.	8	High	Pooja Balasubramanian

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	7 Days	24 Oct 2022	29 Oct 2022	20	31 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	19 Nov 2022

Velocity:
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)

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