Project Planning Phase

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

Team ID	PNT2022TMID12451
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 a 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 design an ML model, the dataset has to download and load into the platform for further analysis	4	Low	Swetha E
Sprint-1	Importing the packages	Task-2	We import the libraries and packages required for the data analysis.	3	High	Swetha E Vaishnavi S
Sprint-1	Data Pre-processing	Task-3	Data cleaning, handling missing values and label encoding were performed in this sprint	8	Medium	Swetha E Vaishnavi S
Sprint-2	Building Web application	USN-1	As a user, they can interact with the UI only to build a web page	5	High	Arunitha V R
Sprint-2	Get the input data	USN-2	As a new users, they have to fill in the details and parameters needed for the prediction	5	High	Arunitha VR
Sprint-2	Splitting the dataset	Task-4	Splitting dataset into train and test split.	3	Medium	Swetha E
Sprint-2	Training the model and testing the model	Task-5	Train the model and test that model	12	High	Swetha E Vaishnavi S
Sprint-3	Build the model	USN-3	Build the ML model	5	High	Swetha E Vaishnavi S
Sprint-3	Evaluating the model	Task-6	Evaluating model with the better accuracy	3	Low	Vaishnavi S

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's needed details in the database.	12	High	Vaishnavi S
Sprint-4	Prediction Page	USN-4	As a user, they have to view the predicted result in a interactive web page	5	Low	Arunitha V R
Sprint-4	Train model on IBM Cloud	Task-8	Train the ML model on IBM Watson studio.	7	Medium	Swetha E
Sprint-4	Flask Integration	Task-9	Integrating the HTML files with the ML model.	8	High	Arunitha V R Swetha E

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	4 Days	15 Oct 2022	19 Oct 2022	20	19 Oct 2022
Sprint-2	20	9 Days	20 Oct 2022	28 Oct 2022	20	28 Oct2022
Sprint-3	20	6 Days	29 Oct 2022	3 Nov 2022	20	3 Nov 2022
Sprint-4	20	7 Days	4 Nov 2022	10 Nov 2022	20	10 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)

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