Early Detection of Chronic Kidney Disease Using Machine Learning

Project Planning Phase

Team ID	**PNT2022TMID03830**
Team lead	**Robsi Rani**
Team members	**Swathi K** **Subashini V** **Mythilee K.L**

Product Backlog, Sprint Schedule, and Estimation

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	Collecting the dataset	USN-1	Collected dataset from Kaggle related to our problem statement.	3	High	Robsi Rani Swathi K Subashini V Mythilee K.L
Sprint-1	Cleaning the dataset	USN-2	Cleaning dataset by handling and replacing missing values and making effective for prediction.	2	High	Robsi Rani Swathi K Subashini V Mythilee K.L
Sprint-1	Model Building	USN-3	Building the model and selecting best ML model based on accuracy for accurate prediction.	4	High	Robsi Rani Swathi K Subashini V Mythilee KL

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Model Evaluation	USN-4	Evaluating the model and finding accuracy for the model.	4	High	Robsi Rani Swathi K Subashini V Mythilee K.L
Sprint-2	User Registration	USN-5	As a user, I can register for the application by entering my email, password, and confirming my password.	3	Medium	Robsi Rani Swathi K Subashini V Mythilee K.L
Sprint-2	User Login	USN-6	As a user, I can log into the application by entering email & password	3	Medium	Robsi Rani Swathi K Subashini V Mythilee K.L
Sprint-2	User Verification	USN-7	Verifying the user through email.	1	Low	Robsi Rani Swathi K Subashini V Mythilee K.L
Sprint-2	Dashboard	USN-8	Designing HTML Dashboard page to navigate for the logged in users.	2	Medium	Robsi Rani Swathi K Subashini V Mythilee K.L
Sprint-3	Integration	USN-9	Using Flask to integrate user dashboard with trained model to predict and request result.	3	High	Robsi Rani Swathi K Subashini V Mythilee K.L

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Train ML Model in IBM	USN-10	The ML model will be trained in IBM by hosting ipynb file in IBM Cloud.	2	High	Robsi Rani Swathi K Subashini V Mythilee K.L
Sprint-3	Integrating with IBM Cloud	USN-11	Integrating trained IBM Cloud Model with scoring endpoints using flask	4	High	Robsi Rani Swathi K Subashini V Mythilee K.L
Sprint-4	Deployment	USN-12	Deploying the IBM model backend flask and frontend application in Cloud	2	Medium	Robsi Rani Swathi K Subashini V Mythilee K.L
Sprint-4	Further Classification	USN-13	Getting user experience feedback and improving the model and application through customer feedback	3	Medium	Robsi Rani Swathi K Subashini V Mythilee K.L

Project Tracker, Velocity & Burndown Chart:

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	13	6 Days	24 Oct 2022	29 Oct 2022	13	29 Oct 2022
Sprint-2	8	6 Days	31 Oct 2022	05 Nov 2022	9	05 Nov 2022
Sprint-3	11	6 Days	07 Nov 2022	12 Nov 2022	9	07 Nov 2022
Sprint-4	5	6 Days	14 Nov 2022	19 Nov 2022	5	14 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)

Sprint 1 AV = Sprint duration/velocity = 13/6 = 2.16

Sprint 2 AV = Sprint duration/velocity = 9/6 =1.5

Sprint 3 AV = Sprint duration/velocity = 9/6 = 1.5

Sprint 4 AV = Sprint duration/velocity = 5/6 = 0.83

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.