Project Planning Phase

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

Date	19 November 2022
Team ID	PNT2022TMID14702
Project Name	Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation
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	Dataset Collection	USN-1	Collect the dataset for classification from sources available on the internet.	10	High	Prasanna Kumar, Nithiyanantham
Sprint-1	Image Preprocessing	USN-2	Remove noise present in the images collected and perform data pre-processing	10	High	Prasanna Kumar, Nithiyanantham,Mohammed attique
Sprint-2	Build the CNN Model	USN-3	Identify the appropriate layers required for the model and determine the model parameters	2	High	Prasanna Kumar, Nithiyanantham,prabakaran
Sprint-2	Configure the model	USN-4	Perform model configuration by compiling it and implement techniques for loss reduction	5	Medium	Prasanna Kumar, Nithiyanantham, prabakaran
Sprint-2	Train, test and validate	USN-5	Initiate model training phase, later based on model and validation loss values, start test phase	13	High	Prasanna Kumar, Nithiyanantham ,Mohammed attique
Sprint-3	Register for IBM Cloud	USN-6	Set up IBM Watson Assistant with Cloud Service	2	High	Prasanna Kumar, Nithiyanantham
Sprint-3	Develop the web interface using Flask	USN-7	Design a UI for the web interface, with login, registration and input adding features	5	High	Prasanna Kumar, Nithiyanantham,

						,Mohammed attique
Sprint-3	Perform server-side scripting	USN-8	Develop an application using python for back-end functions	13	Medium	Prasanna Kumar, Nithiyanantham

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Integrate CNN Model with Web interface	USN-9	Use IBM Watson to train the model and integrate it with the Flask application	2	High	Prasanna Kumar, Nithiyanantham , prabakaran
Sprint-4	Deployment and Testing	USN-10	Start applying multiple test cases for the developed application	5	Medium	Prasanna Kumar, Nithiyanantham
Sprint-4	Maintain database for multiple user accounts	USN-11	Create databases for multiple users and maintain history of cases for each individual user	13	Low	Prasanna Kumar, Nithiyanantham

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	06 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	13 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

Velocity:

Imagine we have a 6-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)

$$AV = \frac{20}{6} = 3.33$$

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.