Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID52879
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	Download The Dataset	USN-1	We can download the Dataset contains Six classes	1	Low	Mridhul K Malepati Pranavi
Sprint-1	Import The ImageDataGenerator Library	USN-2	We can import ImageDataGenerator	1	Low	Gayathri S Aaryan Siddharthan
Sprint-1	Configure ImageDataGenerator class	USN-3	We can configure the ImageDataGenerator class	1	Low	Mridhul K Malepati Pranavi
Sprint-2	Apply the ImageDataGenerator	USN-4	We can apply ImageDataGenerator to train dataset	2	Medium	Aaryan Siddharthan Mridhul K Gayathri S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
	functionality to Trainset and Dataset					Malepati Pranavi
Sprint-1	Import Libraries	USN-5	We can import required Libraries	1	Low	Aaryan Siddharthan
Sprint-1	Initialize the Model	USN-6	Initializing the Image recognition model	2	Medium	Gayathri S Mridhul K
Sprint-4	Adding CNN layer	USN-7	We can add Convolutional Neural Network(CNN) used for image/object recognition and classification	4	High	Malepati Pranavi Aaryan Siddharthan
Sprint-4	Adding Dense Layer	USN-8	We can add Dense Layer in which each neuron receives input from all the neurons of previous layer	4	High	Mridhul K Gayathri S Malepati Pranavi
Sprint-4	Configure The Learning Process	USN-9	We can configure The Learning process which is a method, mathematical logic or algorithm that improves the network's performance and/or training time.	4	High	Aaryan Siddharthan Mridhul K Gayathri S Malepati Pranavi
Sprint-3	Train the Model	USN-10	We can train our model with our image dataset. fit_generator functions used to train a deep learning neural network	3	High	Aaryan Siddharthan Gayathri S
Sprint-1	Save the Model	USN-11	We can save The model with .h5 extension	2	Medium	Malepati Pranavi Mridhul K
Sprint-2	Test the model	USN-12	We can Test the model through Loaded necessary libraries, the saved model	2	Medium	Mridhul K Aaryan Siddharthan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Create Html files	USN-13	We use HTML to create the front end part of the web page.	3	High	Gayathri S Malepati Pranavi
Sprint-4	Build Python code	USN-14	We build the flask file ‘app.py’ which is a web framework written in python for server-side scripting.	4	High	Mridhul K Malepati Pranavi
Sprint-1	Run the App	USN-15	We can run the App	2	Medium	Aaryan Siddharthan Gayathri S
Sprint-2	Register IBM Cloud	USN-16	We can register IBM Cloud	2	Medium	Mridhul K Malepati Pranavi
Sprint-3	Train the model on IBM	USN-17	We can Train Out model on IBM	3	High	Aaryan Siddharthan Gayathri S

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	5 Days	24 Oct 2022	28 Oct 2022	20	28 Oct 2022
Sprint-2	20	5 Days	30 Oct 2022	04 Nov 2022	20	04 Nov 2022
Sprint-3	20	5 Days	06 Nov 2022	11 Nov 2022	20	11 Nov 2022
Sprint-4	20	5 Days	13 Nov 2022	18 Nov 2022	20	18 Nov 2022

Velocity:
To calculate the team's **average velocity (AV)** per iteration unit

$$Av = \frac{Velocity}{Sprint\ duration}$$

Where,

Average Velocity - Story points per day
Sprint duration - Number of days (Duration) for Sprints
Velocity - Points per Sprint

$$Av = \frac{20}{5} = 5$$

Average Velocity is **4** points per Sprint

Burndown Chart:
A burndown 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.

Burndown Chart