

## Project Planning Phase

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

Date	28 October 2022
TeamID	PNT2022TMID44944
ProjectName	ClassificationOfArrhythmiaByUsing DeepLearningWith2-DECGSpectralImageRepresentation
MaximumMarks	8Marks

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 will download the Dataset contains Six classes	2	Low	4
Sprint-1	Import The Image Data Generator Library	USN-2	We will import Image Data Generator	2	Low	4
Sprint-1	Configure Image Data Generator classes	USN-3	We will configure the Image Data Generator class	6	Medium	4
Sprint-1	Apply the Image Data Generator functionality to Train dataset	USN-4	We will apply Image Data Generator to train dataset	10	High	4

Sprint	Functional Requirement (Epic)	User Story Number	User Story/Task	Story Points	Priority	Team Members
Sprint-2	Import Libraries	USN-5	We will import required libraries	1	Low	4
Sprint-2	Initialize the Model	USN-6	Initializing the image recognition mode	1	Medium	4
Sprint-2	Adding CNN layer	USN-7	We will add Convolutional Neural Network (CNN) used for image/object recognition and classification	4	High	4

Sprint-2	AddingDenseLayer	USN-8	We will add Dense Layer in which each neuron receives input from all the neurons of previous layer	4	High	4
Sprint-2	ConfigureThe LearningProcess	USN-9	We will configure The Learning process which is a method, mathematical logic or algorithm that improves the network's performance and/or training time.	2	Medium	4
Sprint-2	TraintheModel	USN-10	We will train our model with our image dataset. Fit generator functions used to train a deep learning neural network	4	High	4
Sprint-2	SavetheModel	USN-11	We will save the model with .h5 extension	2	Medium	4
Sprint-2	Testthemodel	USN-12	We will Test the model through Loaded necessary libraries, the saved model	2	Medium	4

Sprint	Functional Requirement(Epic)	User Story Number	User Story/Task	Story Points	Priority	Team Members
Sprint-3	CreateHtmlfiles	USN-13	We use HTML to create the frontend part of the webpage.	8	High	4
Sprint-3	BuildPython code	USN-14	We build the flask file 'app.py' which is a web framework written in python for server-side scripting.	8	High	4
Sprint-3	RuntheApp	USN-15	We can run the App	4	Medium	4
Sprint-4	RegisterIBMCLOUD	USN-16	We can register IBM Cloud	6	Medium	4
Sprint-4	Trainthemodelon IBM	USN-17	We can Train Out model on IBM	14	High	4

### 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	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:

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

$$AV = \frac{\text{Velocity}}{\text{Sprint duration}}$$

Where

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

$$A = 20 / 6 = 3.3$$

Average velocity is 3.3 points per Sprint

## **BurndownChart:**

A burndown chart is a graphical representation of work left to do over 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.

### **BurndownChart:**

