

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID29187
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	Data collection (Dataset)	USN-1	As a user, I will download dataset of gestures for this project.	2	High	srinath.M yunoos.k samson.A ezhilarasan.I
Sprint-1	Image Preprocessing	USN-2	As a user, I will import necessary libraries for configuration of image datagenerator and applying them to test and train dataset.	2	High	srinath.M yunoos.k samson.A
Sprint-2	Model Building	USN-3	As a user, I can import necessary libraries and models of CNN and adding Dense layers.	2	Low	yunoos.k samson.A ezhilarasan.I
Sprint-2	Model Building	USN-4	As a user, I will train, save and test the model.	2	Medium	yunoos.k samson.A
Sprint-3	Application Building	USN-5	As a user, I create html front page (CSS for styling webpage and JS to connect back end).	1	High	srinath.M

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Application Building	USN-6	As a user, I use python flask for building back end(for server side scripting).	2	High	srinath.M yunoos.k
Sprint-3	Application Building	USN-7	As a user, going to run the application by combining both front end and back end.	2	High	srinath.M yunoos.k samson.A ezhilarasan.I
Sprint-4	Train the model on IBM	USN-8	As a user, register for IBM cloud.	1	Medium	srinath.M yunoos.k samson.A ezhilarasan.I
Sprint-4	Train the model on IBM	USN-9	As a user, train the model on IBM and integrate it with the flask application.	2	High	srinath.M yunoos.k samson.A ezhilarasan.I

**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:

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)

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

**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.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

**Reference:**

<https://www.atlassian.com/agile/project-management>

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

<https://www.atlassian.com/agile/tutorials/epics>

<https://www.atlassian.com/agile/tutorials/sprints>

<https://www.atlassian.com/agile/project-management/estimation>

<https://www.atlassian.com/agile/tutorials/burndown-charts>