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

Date	31 October 2022
Team ID	PNT2022TMID36404
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	4	Low	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-1	Import The ImageDataGenerator Library	USN-2	We can import ImageDataGenerator	4	Low	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-1	Configure ImageDataGenerator class	USN-3	We can configure the ImageDataGenerator class	6	Medium	Gayathri VS Bharathi S Iswariya S Sangeetha S

Sprint-1	Apply the ImageDataGenerator functionality to Train Set and Dataset	USN-4	We can apply ImageDataGenerator to train dataset	6	Medium	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-2	Import Libraries	USN-5	We can import required Libraries	1	Low	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-2	Initialize the Model	USN-6	Initializing the Image recognition model	2	Medium	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-2	Adding CNN layer	USN-7	We can add Convolutional Neural Network(CNN) used for image/object recognition and classification	4	High	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-2	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	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-2	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	Gayathri VS Bharathi S Iswariya S Sangeetha S

Sprint-2	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	4	High	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-2	Save the Model	USN-11	We can save The model with .h5 extension	2	Medium	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-2	Test the model	USN-12	We can Test the model through Loaded necessary libraries, the saved model	2	Medium	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-3	Create Html files	USN-13	We use HTML to create the front-end part of the web page.	8	High	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-3	Build Python code	USN-14	We build the flask file ‘app.py’ which is a web framework written in python for server-side scripting.	8	High	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-3	Run the App	USN-15	We can run the App	4	Medium	Gayathri VS Bharathi S Iswariya S Sangeetha S

Sprint-4	Register IBM Cloud	USN-16	We can register IBM Cloud	8	Medium	Gayathri VS Bharathi S Iswariya S Sangeetha S
Sprint-4	Train the model on IBM	USN-17	We can Train Out model on IBM	12	High	Gayathri VS Bharathi S Iswariya S Sangeetha 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	8 Days	24 Oct 2022	30 Oct 2022	20	31 Oct 2022
Sprint-2	23	7 Days	30 Oct 2022	04 Nov 2022	20	05 Nov 2022
Sprint-3	20	7 Days	06 Nov 2022	11 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	13 Nov 2022	17 Nov 2022	20	18 Nov 2022

Velocity:

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

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

Average Velocity - Story points per day

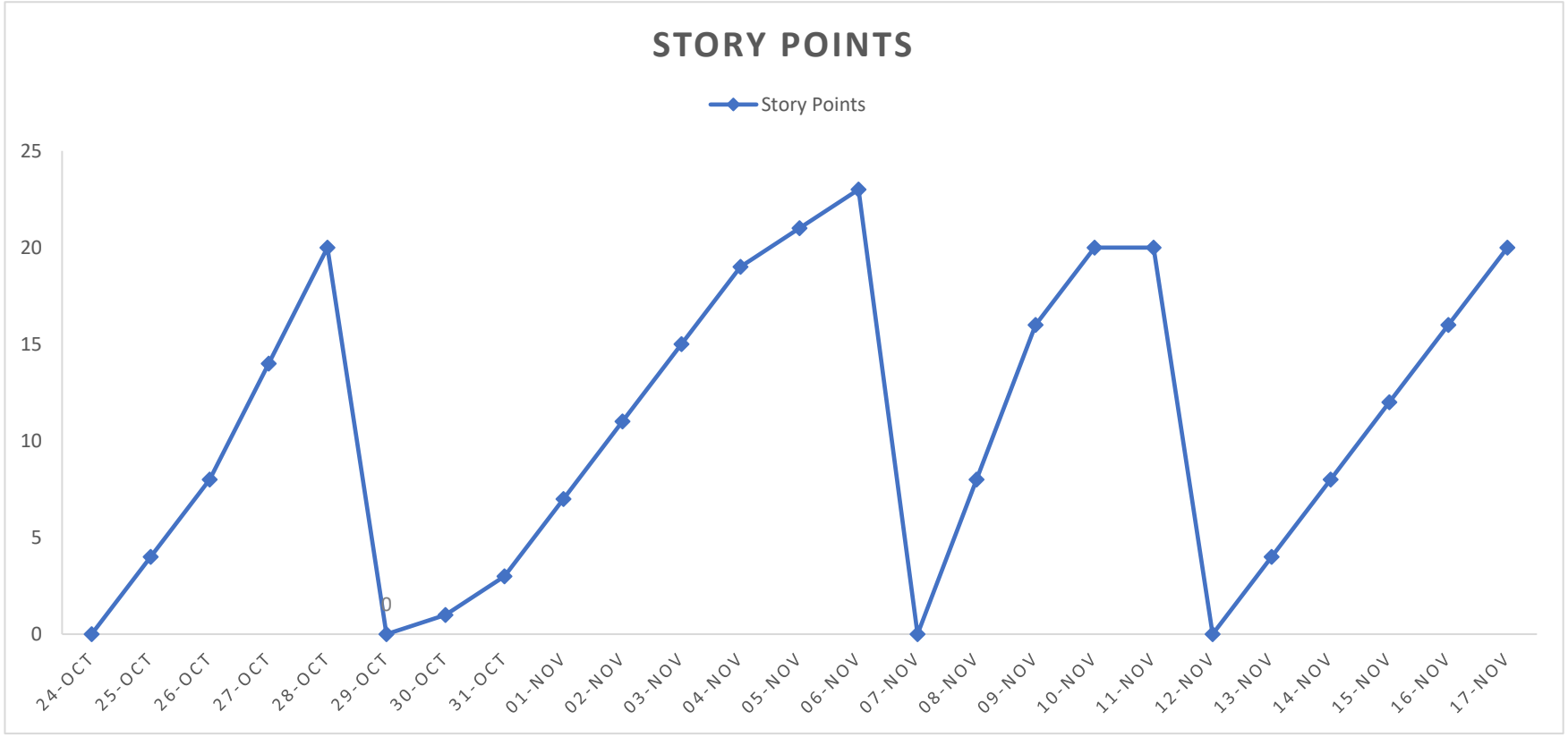
Sprint duration - Number of days (Duration) for Sprints

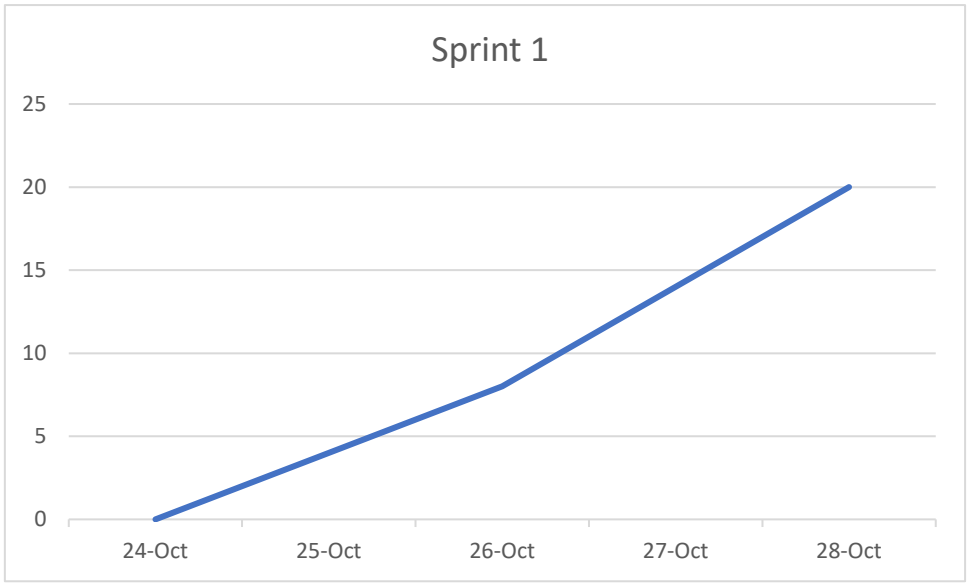
Velocity

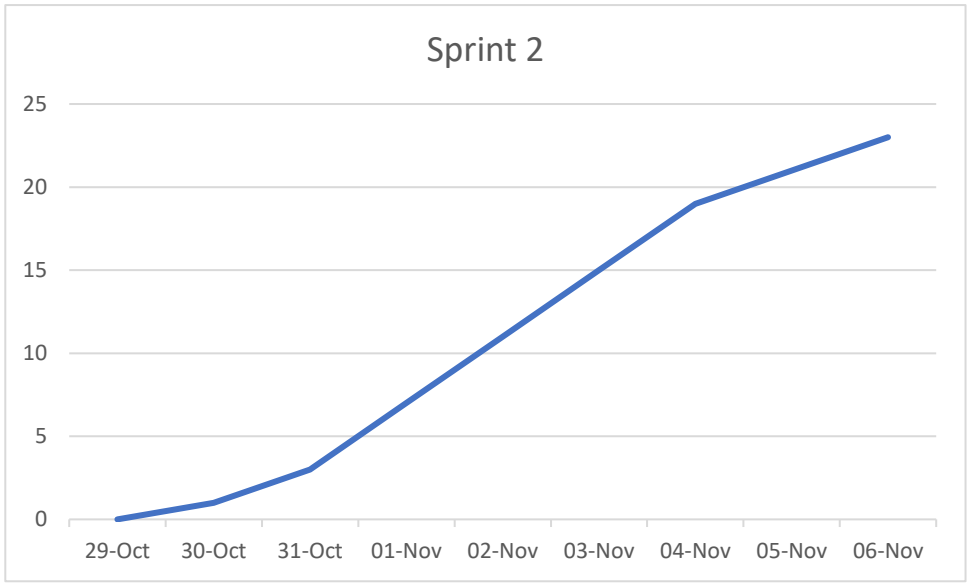
$Av = \frac{20}{7} = 2.8$

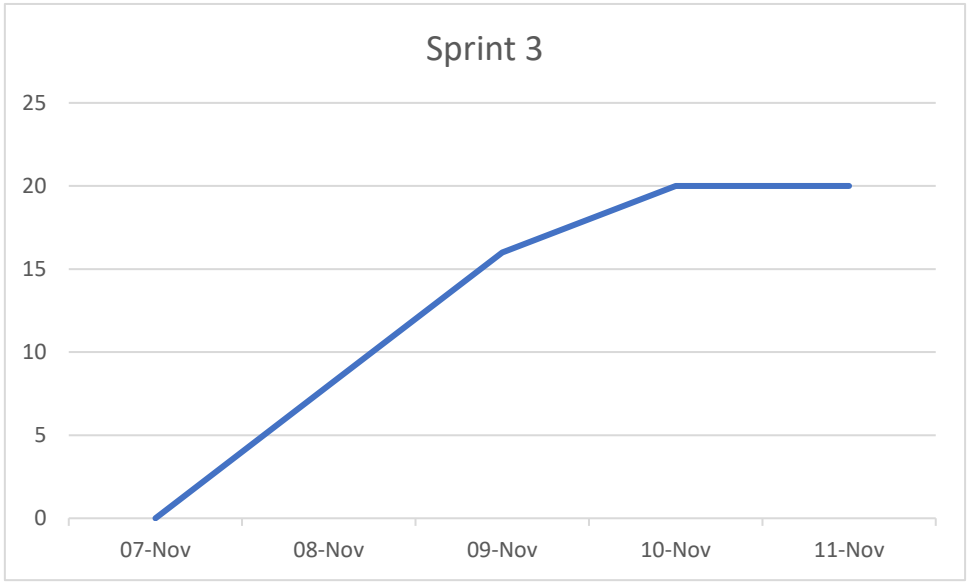
Average Velocity is **2.8** points per Sprint

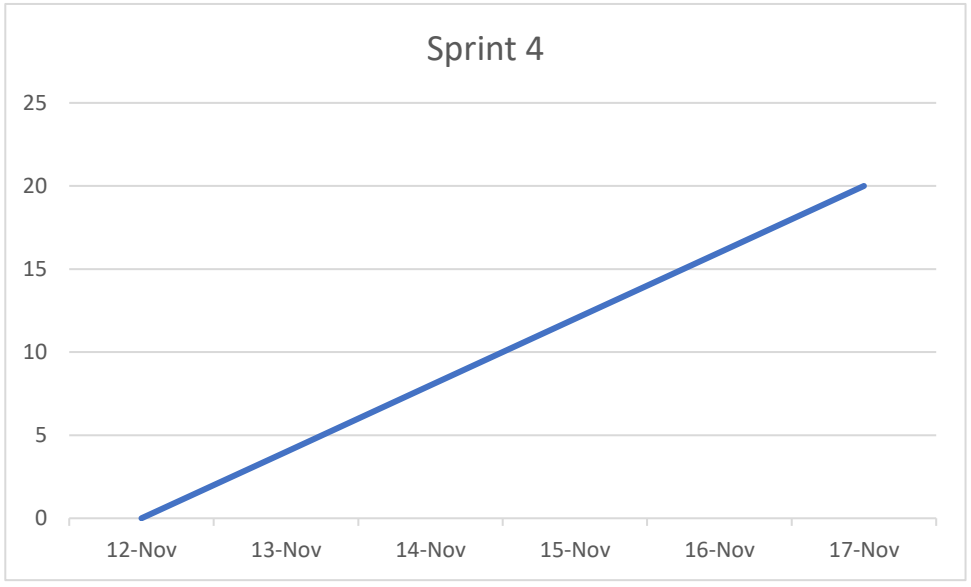
Burndown Chart:




Sprint 1
25
20
15
10
5
0
24-Oct
25-Oct
26-Oct
27-Oct
28-Oct


Sprint 2
25
20
15
10
5
0
29-Oct
30-Oct
31-Oct
01-Nov
02-Nov
03-Nov
04-Nov
05-Nov
06-Nov


Sprint 3
25
20
15
10
5
0
07-Nov
08-Nov
09-Nov
10-Nov
11-Nov


Sprint 4
25
20
15
10
5
0
12-Nov
13-Nov
14-Nov
15-Nov
16-Nov
17-Nov