

Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID52888
Project Name	Project - Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy
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	Task-1	As a developer we need to collect the data	5	Medium	Anjali, Anusha, Bharath
Sprint-1	Data preprocessing	Task-2	We import the required libraries for preprocessing. We instantiate the ImageDataGenerator class to configure and augment different types of image data.	5	Medium	Anusha, Afnan, Anjali
Sprint-2	Feature Extraction	Task-3	Build a CNN Model and only use it as a feature extraction by freezing the convolution blocks.	10	High	Anjali
Sprint-2	Building the layers	Task-4	Adding of dense layers with the aid of Keras. Addition of Optimizer, choosing loss function and the Metrics.	10	High	Anusha, Afnan
Sprint-2	Train, Save, Test	Task-5	To train the model with the configured neuralnetwork and save the model. Test the built model against the testing dataset.	10	High	Anjali, Anusha, Afnan, Bharath
Sprint-2	Building Registration Page	USN-1	As a user, they will be able to register for the application.	2	Low	Anusha

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Create Service Instance	Task-6	Configure the location of resources, such as web server, and Cloud Storage for an application	10	High	Afnan
Sprint-3	Configuring credentials and creating DB	Task-7	Define the credentials that are required to access the services offered by IBM Cloudant and add users to access the DB.	10	High	Bharath, Anjali
Sprint-3	Create Tables in DB	Task-8	Structure the required tables with necessary attributes in Cloudant DB.	5	Medium	Afnan
Sprint-3	Building Login Page	USN-2	As a user, they will be able to login using their credentials.	5	Medium	Bharath
Sprint-4	Building Homepage	USN-3	As a user, they will be given a brief description in the homepage.	5	Medium	Bharath
Sprint-4	Train Model On IBM	Task-9	train the model on IBM and integrate it with the flask Application.	10	High	Anjali, Anusha, Afnan, Bharath

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	10	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	32	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	30	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	15	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)

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

- **SPRINT 1**=10/6=1.666
- **SPRINT 1**=32/6=5.333
- **SPRINT 1**=30/6=5
- **SPRINT 1**=15/6=2.5