

## Project Planning Phase

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

Date	05 November 2022
Team ID	PNT2022TMID36211
Project Name	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	To build a Deep learning Model which begins with the process of splitting data into training and testing set.	4	Medium	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
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	Low	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-1	Data Preprocessing	Task-3	Application of the Image Data Generator to the Train and Test Set.	7	Medium	Sowmiya R, Snega S
Sprint-1	Building Homepage	USN-1	As a user, she will be given a brief description in the homepage.	4	Low	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-2	Feature Extraction	Task-4	Build a CNN Model and only use it as a feature extraction by freezing the convolution blocks.	8	High	Sowmiya R, Snega S
Sprint-2	Building the layers	Task-5	Adding of dense layers with the aid of Keras. Addition of Optimizer, choosing loss function and the Metrics.	7	High	Vigneshwaran V, Sowmiya S
Sprint-2	Train, Save, Test	Task-6	To train the model with the configured neural network and save the model. Test the built model against the testing dataset.	3	High	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-2	Building Registration Page	USN-2	As a user, she will be able to register for the application.	2	Low	Vigneshwaran V, Sowmiya S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Create Service Instance	Task-7	Configure the location of resources, such as web server, and Cloud Storage for an application	7	High	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-3	Configuring credentials and creating DB	Task-8	Define the credentials that are required to access the services offered by IBM Cloudant and add users to access the DB.	6	High	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-3	Create Tables in DB	Task-9	Structure the required tables with necessary attributes in Cloudant DB.	4	Medium	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-3	Building Login Page	USN-3	As a user, she will be able to login using her credentials.	3	Low	Vigneshwaran V, Sowmiya S
Sprint-4	Building prediction page	USN-4	As a user, she will be able to receive the diagnosis on her diabetic retinopathy.	2	Medium	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-4	Building Logout Page	USN-5	As a user, she will be able to logout of her account in this page.	2	Medium	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-4	Build python code	Task-9	Import the libraries and Initialise the necessary modules	1	Medium	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-4		Task-10	Use the database using initiated client and rendering HTML pages	2	Medium	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-4		Task-11	Configuring the registration, login pages and validating the credentials.	2	Medium	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-4		Task-12	Showcasing the model's prediction on UI.	1	High	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-4	Run the application.	Task-13	Run the application in the anaconda prompt to check the application.	2	High	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-4		Task-14	In the homepage, after logging on using credentials, upload the image to predict the diagnosis on diabetic retinopathy.	5	High	Vigneshwaran V, Sowmiya S, Sowmiya R, Snega S
Sprint-4	Train Model On IBM	Task-15	train the model on IBM and integrate it with the flask Application.	3	High	Vigneshwaran V, Sowmiya S

**Project Tracker, Velocity & Burndown Chart: (4 Marks)**

<b>Sprint</b>	<b>Total Story Points</b>	<b>Duration</b>	<b>Sprint Start Date</b>	<b>Sprint End Date (Planned)</b>	<b>Story Points Completed (as on Planned End Date)</b>	<b>Sprint Release Date (Actual)</b>
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	5 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