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

Date	18 October 2022
Team ID	PNT2022TMID33204
Project Name	Deep Learning Funds 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	Keerthana M N
Sprint-1	Data pre-processing	Task-2	We import the required libraries for pre-processing. We instantiate the Image Data Generator class to configure and augment different types of image data	5	Low	Kiruba Nandhini m & Krishna priya k
Sprint-1	Data pre-processing	Task-3	Application of the Image Data Generator to the Train and Test Set.	7	Medium	Lakshmi preetha s
Sprint-1	Building Homepage	USN-1	As a user, she will be given a brief description in the homepage.	4	Low	Kiruba Nandhini m&Keerthana m n

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
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	Krishna priya k & Keerthana M N
Sprint-2	Building Registration Page	Task-5	Adding of dense layers with the aid of Keas. Addition of Optimizer, choosing loss function and the Metrics.	7	High	Keerthana M N & Lakshmi preetha s& Krishna priya k
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	Kiruba Nandhini m
Sprint-2	Building Registration Page	USN-2	As a user, She will be able to register for the application	2	Low	Lakshmi preetha s
Sprint-3	Create Service Instance	Task-7	Configure the location of resource, such as web server and cloud storage for an application.	7	High	Krishna priya k& Keerthana M N
Sprint-3	Configuring credentials and creating DB	Task-8	Define the credentials that are required to access the services offered by IBM Cloud and add users to access the DB.	6	High	Lakshmi preetha S & Kiruba Nandhini M
Sprint-3	Creating Tables in DB	Task-9	Structure the required tables with necessary attributes in cloudant DB.	4	Medium	Keerthana M N & Krishna priya k& Kiruba Nandhini M
Sprint-3	Building Login Page	USN-3	As a user, she will be able to login using her credentials.	3	Low	Lakshmi preetha 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	Krishna priya K& Lakshmi preetha S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Building Logout Page	USN-5	As a user, she will be able to logout of her account in this page.	2	Medium	Keerthana M N& Kiruba Nandhini M
Sprint-4	Build python code	Task-9	Import the libraries and initiated the necessary modules.	1	Medium	Krishna priya K
Sprint-4		Task-10	Use the database using initiated client and rendering HTML pages.	2	Medium	Keerthana M N
Sprint-4		Task-11	Configuring the registration, login pages and rending HTML pages.	2	Medium	Kiruba Nandhini M
Sprint-4		Task-12	Showcasing the model's prediction on UI.	1	High	Krishna priya K& Kiruba Nandhini M
Sprint-4	Run the application	Task-13	Run the application in the anaconda prompt to check the application.	2	High	Keerthana M N& Lakshmi preetha 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	Keerthana M N
Sprint-4	Train Model On IBM	Task-15	Train the model on IBM and integrate it with the flask application.	3	High	Kiruba Nandhini M

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	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

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)

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