Project Planning Phase

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

Date	8 November 2022
Team ID	PNT2022TMID23784
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	Uthayasri
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	Vaishnavi
Sprint-1	Data Preprocessing	Task-3	Application of the ImgaeDataGenerator to the Train and Test Set.	7	Medium	Renisha jeya roxey
Sprint-1	Building Homepage	USN-1	As a user, she will be given a brief description in the homepage.	4	Low	Subalakshmi
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	uthayasri
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	Uthayasri
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	Vaishnavi
Sprint-2	Building Registration Page	USN-2	As a user, she will be able to register for the application.	2	Low	Renisha jeya roxey

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	Subalakshmi & Vaishnavi
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	Uthayasri
Sprint-3	Create Tables in DB	Task-9	Structure the required tables with necessary attributes in Cloudant DB.	4	Medium	Renisha jeya roxey
Sprint-3	Building Login Page	USN-3	As a user, she will be able to login using her credentials.	3	Low	Uthayasri,renisha,vaishnavi,subalakshmi
Sprint-4	Building prediction page	USN-4	As a user, she will be able to receive the diagnosis on her diabetic retinopathy.	2	Medium	Subalakshmi
Sprint-4	Building Logout Page	USN-5	As a user, she will be able to logout of her account in this page.	2	Medium	Vaishnavi
Sprint-4	Build python code	Task-9	Import the libraries and Initialise the necessary modules	1	Medium	Renisha jeya roxey
Sprint-4		Task-10	Use the database using initiated client and rendering HTML pages	2	Medium	Uthayasri
Sprint-4		Task-11	Configuring the registration, login pages and validating the credentials.	2	Medium	Renisha jeya roxey
Sprint-4		Task-12	Showcasing the model’s prediction on UI.	1	High	Vaishnavi
Sprint-4	Run the application.	Task-13	Run the application in the anaconda prompt to check the application.	2	High	Subalakshmi
Sprint-4		Task-14	In the homepage, after logging on using credentials, upload the image to predict the diagnosis on diabetic retinopathy.	5	High	Uthayasri & renisha jeya roxey
Sprint-4	Train Model On IBM	Task-15	train the model on IBM and integrate it with the flask Application.	3	High	Vaishnavi & subalakshmi

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)

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