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

Date	**7th November 2023**
Team ID	**Team-592277**
Project Name	**End-To-End Deep Learning Project For Detecting Melanoma Diseases.**
Maximum Marks	**8 Marks**

Product Backlog, Sprint Schedule, and Estimation:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Project setup & Infrastructure	USN-1	Set up the development environment with the required tools and frameworks to start Project For Detecting Melanoma Diseases	1	High	Alex
Sprint-2	Data collection	USN-2	Gather a diverse dataset of dermatological images, Ensure dataset contains labelled images for benign and malignant melanoma, Ensure data is representative of different skin types, ages, and genders.	2	High	Prabhat

Sprint-3	Data pre-processing	USN-3	Prepare the dataset for deep learning model training. Split the dataset into training, validation, and testing sets.	3	High	Alex
Sprint-4	Model development	USN-4	Create a deep learning model for melanoma detection. Choose a suitable deep learning architecture like CNN, Inception, ResNet.	4	High	Saifulla
Sprint-5	Training	USN-5	Train the model on the pre-processed dataset. Monitor training progress and adjust hyperparameters as needed.	6	Medium	Saifulla
Sprint-6	Model evaluation	USN-6	Assess the model's performance. Evaluate the model on the validation set using appropriate metrics (e.g., accuracy, F1 score, ROC AUC).	1	Medium	Prabhat
Sprint-7	Model deployment	USN-7	Develop a user-friendly interface for uploading images for prediction. Ensure security and privacy measures for sensitive medical data. Monitor and maintain the deployed model.	1	Medium	Alex

Project Tracker, Velocity & Burndown Chart:

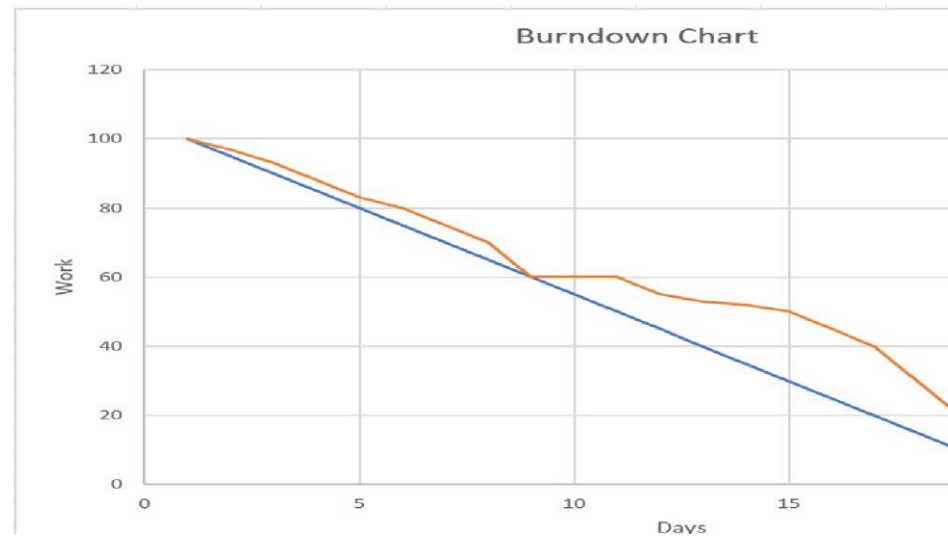| Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	3	1 Days	30 Oct 2023	30 Oct 2023	20	3 Nov 2023
Sprint-2	5	4 Days	31 Oct 2023	3 Nov 2023		
Sprint-3	10	5 Days	4 Nov 2023	8 Nov 2023		
Sprint-4	1	10 Days	9 Nov 2023	18 Nov 2023		
Sprint-5	1	4 Days	19 Nov 2023	22 Nov 2023		

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)

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

AV = 24/20 =1.2

Burndown Chart:

A burndown chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

Burndown Chart

Reference:

https://www.kaggle.com/datasets/kmader/skin-cancer-mnist-ham10000

https://www.kaggle.com/datasets/fanconic/skin-cancer-malignant-vs-benign