

## Project Planning Phase

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

Date	27 October 2023
Team ID	Team-592806
Project Name	Early Diagnosis Of Diseases Using Image Processing Of Human Nails
Maximum Marks	8 Marks

#### Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1,2	Data Collection and Preprocessing	USN-1	As a Data Scientist, I want to Clean and preprocess the collected data, addressing issues like noise, artifacts, and inconsistent image resolutions.	10	Medium-High	Harsh Pandey Rahul Kumar Kabir Chawla Akshat Goyal
Sprint-3,4	Model Architecture and Development	USN-2	As a Machine Learning Engineer, I want to Implement the selected model architecture using a deep learning framework (e.g., TensorFlow or PyTorch).  Train the model on the preprocessed dataset, optimizing hyperparameters and incorporating data augmentation.	15	High	Harsh Pandey
Sprint-5,6	Model Evaluation and Optimization	USN-3	As a Machine Learning Engineer, I want to Fine-tune the model by adjusting hyperparameters, including learning rate and batch size, to improve its predictive accuracy.	10	Medium	Kabir Chawla Akshat Goyal

Sprint-7,8	Model Deployment and Integration	USN-4	As a Full Stack Developer, I want to Develop an API or web interface to enable users to submit images for disease prediction.	10	High	Harsh Pandey Rahul Kumar
Sprint-9,10	Testing and Evaluation	USN-5	As an Assurance Specialist, I want to test the track the model's performance, including prediction accuracy and response times.  Set up automated alerting and error-handling mechanisms to address issues in real-time.	8	Medium	Harsh Pandey Akshat Goyal Rahul Kumar Kabir Chawla

#### 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-1,2	10	3 Days	13 Oct 2023	16 Oct 2023	10	16 Oct 2022
Sprint-3,4	15	7 Days	16 Oct 2023	23 Oct 2023	15	23 Oct 2023
Sprint-5,6	10	3 Days	23 Oct 2023	24 Oct 2023	10	24 Oct 2023
Sprint-7,8	10	2 Days	26 Oct 2023	28 Oct 2023	10	29 Oct 2023
Sprint-9,10	8	3 Days	29 Oct	2 Nov 2023	8	9 Nov 2023

## Velocity:

The team velocity of 18 Days Sprint duration is :

$$\text{Velocity} = (10+15+10+10+8)/5 = 10.6$$

Average Velocity = Sprint Duration / Velocity

$$= 18 / 10.6$$

$$= 1.7$$

## Burndown Chart:







