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

Date	16 November 2023
Team ID	Team-592536
Project Name	AI Body Language Detector Using Media Pipe
Maximum Marks	20 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	Project setup & Infrastructure	USN-1	Set up the development environment with the required tools and frameworks to start the AI body language detection project for emotion recognition (e.g., detecting sadness, anger).	1	High	Riya
Sprint-1	Development Environment	USN-2	Gather a diverse dataset of images containing different body language expressions for training the AI body language detection model, specifically focusing on emotions like sadness and anger	2	High	Aditya Bajaj
Sprint-2	Data collection	USN-3	Preprocess the collected dataset by resizing images, normalizing pixel values, and splitting it into training and validation sets for AI body language detection.	2	High	Vasundhara
Sprint-2	Data preprocessing	USN-4	Explore and evaluate different AI body language detection architectures within Mediapipe (e.g., pose estimation models) to select the most suitable model for emotion recognition (e.g., sadness and anger).	3	High	Aditya Bajaj
Sprint-3	Model Development	USN-5	Train the selected AI body language detection model using the pre-processed dataset and monitor its performance on the validation set, specifically focusing on recognizing emotions like sadness and anger	4	High	Vasundhara
Sprint-3	Training	USN-6	Implement data augmentation techniques (e.g., rotation, flipping) to improve the AI body language detection model's robustness and accuracy in recognizing emotions such as sadness and anger.	6	Medium	Riya
Sprint-4	Model deployment & Integration	USN-7	Deploy the trained AI body language detection model, integrating it into an API or web service to make it accessible for emotion recognition, particularly for emotions like sadness and anger. Integrate the model's API into a user-friendly web	1	Medium	Aditya Bajaj

			interface for users to upload images and receive emotion classification results.			
Sprint-5	Testing & quality assurance	USN-8	Conduct thorough testing of the AI body language detection model and web interface to identify and report any issues or bugs. Finetune the model hyperparameters and optimize its performance based on user feedback and testing results for emotion recognition.	1	Medium	Vasundhara

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	3	3 Days	25 Oct 2023	28 Oct 2023	20	28 Oct 2023
Sprint-2	5	5 Days	29 Oct 2023	2 Nov 2023		
Sprint-3	10	5 Days	3 Nov 2023	7 Nov 2023		
Sprint-4	1	4 Days	8 Nov 2023	11 Nov 2023		
Sprint-5	1	4 Days	12 Nov 2023	15 Nov 2023		

Velocity:

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=22/20

=1.1

Burndown Table

Story Points	Remaining Points	Completed Points
20	20	0
20	18	2
18	16	2
16	14	2
14	10	4
10	7	3
7	4	3
4	1	3
1	0	1

Burndown Chart