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

Date	16 November 2023
Team ID	Team-593070
Project Name	Project – Image Caption Generator
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	Project setup & Infrastructure	USN-1	Set up the development environment with the required tools and frameworks to start the Image caption generator	2	High	Ashima Fatima Seik Mugibur Raghman
	development environment	USN-2	Gather a diverse dataset of images containing different types of garbage (plastic, paper, glass, organic) for training the deep learning model.	1	High	Ashima Fatima Seik Mugibur Raghman

	Data collection	USN-3	Preprocess the collected dataset by resizing images, normalizing pixel values, and splitting it into training and validation sets.	2	High	Ashima Fatima Seik Mugibur Raghman
	data preprocessing	USN-4	Explore and evaluate different deep learning architectures (e.g., CNNs) to select the most suitable model for garbage classification.	3	high	Ashima Fatima Seik Mugibur Raghman
	model development	USN-5	train the selected deep learning model using the preprocessed dataset and monitor its performance on the validation set.	3	high	Ashima Fatima Seik Mugibur Raghman
	Training	USN-6	implement data augmentation techniques (e.g., rotation, flipping) to improve the model's robustness and accuracy.	4	high	Ashima Fatima Seik Mugibur Raghman

Sprint-2	proposed solution	USN-7	proposed the solution to bridge the gap between the between visual content and accessibility	2	Low	Archita Biswas
	literature review	USN-8	synthesizing and critically analyzing relevant literature to establish the context, identify gaps, and highlight key findings	2	Medium	Misbah Anwar
	video creation	USN-9	dynamic and engaging medium to convey the key aspects of the project	3	High	Misbah Anwar
	brainstorming	USN-10	emphasizing the critical role played by these early stages in shaping the project's direction and ensuring alignment with stakeholder expectations	3	High	Misbah Anwar
	documentation	USN-11	detailing every aspect of the project	1	Medium	Archita Biswas
Sprint-3	Login	USN-12	in developing the login and sign-in pages, pivotal components that ensure secure user authentication via gmail	2	High	Archita Biswas
	Login	USN-13	in developing the login and sign-in pages, pivotal components that ensure secure user authentication via facebook	2	High	Archita Biswas

Sprint-4	model deployment & Integration	USN-14	deploy the trained deep learning model as an API or web service to make it accessible for garbage classification. integrate the model's API into a user-friendly web interface for users to upload images and receive image caption generator results	3	High	Ashima Fatima Seik Mugibur Raghman
Sprint-5	Testing & quality assurance	USN-15	conduct thorough testing of the model and web interface to identify and report any issues or bugs. fine-tune the model s	3	High	Ashima Fatima Seik Mugibur Raghman

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 2023	29 Oct 2023	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2023	05 Nov 2023	20	3 Nov 2023
Sprint-3	20	6 Days	07 Nov 2023	12 Nov 2023	20	11 Nov 2023
Sprint-4	20	6 Days	14 Nov 2023	16 Nov 2023	20	20 Nov 2021
Sprint -5	20	6 days	18 Nov 2023	20 Nov 2023	20	21 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)

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

Burndown Chart:

A burn down 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.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/

https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:

https://www.atlassian.com/agile/project-management

https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software

https://www.atlassian.com/agile/tutorials/epics

https://www.atlassian.com/agile/tutorials/sprints

https://www.atlassian.com/agile/project-management/estimation

https://www.atlassian.com/agile/tutorials/burndown-charts