Project Planning Phase

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

Date	15 February 2025
Team ID	LTVIP2025TMID33870
Project Name	Pattern Sense: Classifying Fabric Patterns using Deep Learning
Maximum Marks	5 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	Dataset Preparation	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	4
Sprint-1	Model Development	USN-2	As a developer, I want to preprocess images for model training.	1	High	4
Sprint-2	UI and Deployment	USN-3	As a tester, I want to test model performance on unseen patterns.	2	Low	4
Sprint-1	Evaluation & Testing	USN-4	As a developer, I want to deploy the trained model for real-time usage.	2	Medium	4
Sprint-1	Model Development	USN-5	As a tester, I want to evaluate model accuracy using validation datasets.	1	High	4

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	05 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)

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

Reference:

1. **C4 Model for Architecture Design** https://c4model.com/
2. **AI-Powered Order Processing Example** https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/
3. **IBM Cloud Architecture Center** https://www.ibm.com/cloud/architecture
4. **AWS Architecture Center** https://aws.amazon.com/architecture

5. IBM Cloudant NoSQL DB https://www.ibm.com/cloud/cloudant

6. Flask Documentation https://flask.palletsprojects.com/

7. FastAPI Documentation https://fastapi.tiangolo.com/