Project Planning Phase

Project Logic

Agile Concepts :

- **Sprint** – A fixed duration (5 days) in which the team works to complete a set of tasks.

- **Epic** – A large project or feature (e.g., Code Generator) that spans multiple tasks.

- **Story** – A small task that is part of an epic (e.g., Design UI for Code Generator).

- **Story Point** – Represents the effort required to complete a story, often using the Fibonacci series:

  - ✧ 1 – Very Easy
  - ✧ 2 – Easy
  - ✧ 3 – Moderate
  - ✧ 5 – Difficult

Sprint 1: (5 Days)

Epic: Frontend & Authentication

Task	Story Points
Design UI for Login & Sign Up Page (Streamlit)	2
Implement User Authentication (Sign up/Login)	3
Integrate Forgot Password with Email OTP	2

Epic: PDF Upload & Classification

Task	Story Points
Build Upload PDF UI	1
Backend logic to extract and classify content	3
Display SDLC Phase-wise classification results	2

Sprint 1 Total Story Points = 13

Sprint 2: (5 Days)

Epic: Code Generation & Test Generator

Task	Story Points
Build Code Generator UI	1
Connect backend to IBM Watsonx for code generation	5
Build Test Generator UI	1
Integrate AI Test Generation backend	3

Epic: Bug Fixer & Summarizer

Task	Story Points
Upload code & display original	1
Fix bugs via Watsonx integration	3
Generate summary from uploaded code	2

Epic: Backend API

Task	Story Points
Set up FastAPI endpoints for all features	5

Sprint 2 Total Story Points = 21

Summary :

Sprint 1 Total Points = 13

Sprint 2 Total Points = 21

Total Story Points = 13 + 21 = **34**

Number of Sprints = 2

✓ Velocity = Total Story Points / No. of Sprints

Velocity = 34 / 2 = **17 Story Points per Sprint**