**Planning Logic**

**A Sprint** fixed period or duration in which a team works to complete a set of tasks

An **Epic** is a **big task or project** that is too large to complete in one sprint. It is broken down into **smaller tasks (stories)** that can be completed over multiple sprints.

A **Story** is a small task. It is part of an **Epic**.

A **Story Point** is a number that represents how much effort a story takes to complete.

1. Very Easy task
2. Easy task
3. Moderate task
4. Difficult task

**Sprint Planning Logic (2-week cycle)**

### **Epic 1: Project Setup and Integration** (4 Story Points)

| **User Story** | **Story Points** |
| --- | --- |
| Set up FastAPI backend and Streamlit frontend folder structure | 1 |
| Integrate IBM Watsonx Granite LLM via ModelInference | 2 |
| Create reusable config with API key and project ID | 1 |

### **Epic 2: Core Generative AI Development Tools** (6 Story Points)

| **User Story** | **Story Points** |
| --- | --- |
| Code Generator: Generate code from user input | 2 |
| Code Explainer: Explain a topic or logic in any programming language | 2 |
| Requirement to Story Converter: Convert plain text to user stories | 2 |

### **Epic 3: Testing and Debugging Support** (4 Story Points)

| **User Story** | **Story Points** |
| --- | --- |
| Bug Fixer: Take faulty code and suggest corrections | 2 |
| Test Case Generator: Generate test cases from code | 1 |
| Format response outputs clearly for readability | 1 |

### **Epic 4: Final Testing, UI, and Deployment** (3 Story Points)

| **User Story** | **Story Points** |
| --- | --- |
| Build UI for all features using Streamlit | 1 |
| Final testing of all endpoints and error handling | 1 |
| Prepare support and Streamlit launch script | 1 |

### **Summary**

* **Total Story Points**: 17
* **Total Epics**: 4
* **Sprint Duration**: 2 weeks
* **Team Velocity**: 17 SP per sprint