

Agile Planning – Sprint Planning and Velocity Calculation

Sprint Planning Concepts

A Sprint is a fixed time period during which the team completes a defined set of tasks.

An Epic is a large feature that cannot be completed in one sprint. It is divided into smaller tasks called User Stories.

A User Story is a small functional requirement that contributes to completing an epic.

A Story Point represents the effort required to complete a user story. The Fibonacci sequence is used for estimation:

- 1 – Very easy task
 - 2 – Easy task
 - 3 – Moderate task
 - 5 – Complex task
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Sprint 1

Epic 1 – Project Setup and Environment Configuration

Project environment setup (USN-1) – 2

Streamlit installation and configuration (USN-2) – 1

Requirements installation and library setup (USN-3) – 2

Epic 2 – Core Financial File Handling

File upload implementation for CSV and XLSX (USN-4) – 3

File validation and error handling (USN-5) – 2

Data loading using Pandas (USN-6) – 3

Epic 3 – Gemini AI Integration

Gemini API integration (USN-7) – 5

Prompt formatting for financial insights (USN-8) – 3

Epic 4 – Security Implementation

API key configuration using .env (USN-9) – 3

Total Story Points in Sprint 1

$2 + 1 + 2 + 3 + 2 + 3 + 5 + 3 + 3 = 24$ Story Points

Sprint 2

Epic 5 – Dashboard and Metrics Implementation

Calculate total sales, units sold, average price (USN-10) – 3

Display dashboard metrics using Streamlit (USN-11) – 2

Epic 6 – Data Visualization

Sales by country chart (USN-12) – 3

Sales by product chart (USN-13) – 3

Epic 7 – AI Output and UI Enhancement

Display AI-generated financial summary (USN-14) – 2

Improve UI layout and structure (USN-15) – 3

Epic 8 – Testing and Deployment

Functional testing (USN-16) – 3

Performance testing (USN-17) – 2

GitHub repository setup (USN-18) – 2

Documentation preparation (USN-19) – 5

Total Story Points in Sprint 2

$3 + 2 + 3 + 3 + 2 + 3 + 3 + 2 + 2 + 5 = 28$ Story Points

Total Story Points Calculation

Sprint 1 = 24

Sprint 2 = 28

Total Story Points = $24 + 28 = 52$

Number of Sprints = 2

Velocity = Total Story Points / Number of Sprints

Velocity = $52 / 2$

Velocity = 26 Story Points per Sprint

Conclusion

The team's average velocity is approximately 26 Story Points per Sprint. This indicates steady progress and effective task distribution during the development of the Gemini Pro Financial Decoder application. The sprint structure allowed the team to complete core functionality in Sprint 1 and focus on dashboard enhancement, testing, and documentation in Sprint 2.