

## Sprint 1

### Epic 1: User Interface Development

This epic focused on building the Streamlit-based web interface so users can interact with the system.

#### Stories under this epic:

- USN-1: Designing the Streamlit layout and sidebar input (2 Story Points)
- USN-2: Implementing Artifact Name input field (1 Story Point)
- USN-3: Implementing Historical Period input field (1 Story Point)
- USN-4: Implementing word count selection slider (100–2000 words) (2 Story Points)
- USN-5: Creating the section to display generated artifact description (2 Story Points)

Total for Epic 1: 8 Story Points

### Epic 2: Core AI Integration

This epic handled the core functionality of connecting the application with Google Gemini AI.

#### Stories under this epic:

- USN-6: Integrating Google Gemini API with the application (5 Story Points)
- USN-7: Designing structured prompt template (Title, Origin, Material, Historical Context, Cultural Significance) (3 Story Points)
- USN-8: Handling API response and displaying generated output (3 Story Points)

Total for Epic 2: 11 Story Points

### Total Story Points in Sprint 1

Epic 1 (8) + Epic 2 (11) = 19 Story Points

## Sprint 2

### Epic 3: Content Formatting and Export

This epic focused on converting AI output into structured, downloadable format.

#### Stories under this epic:

- USN-9: Structuring output into clear artifact description sections (3 Story Points)
- USN-10: Implementing Markdown file generation (3 Story Points)
- USN-11: Implementing download functionality for .md file (2 Story Points)

Total for Epic 3: 8 Story Points

#### **Epic 4: User Experience Enhancements**

This epic improved usability and system robustness.

##### **Stories under this epic:**

- USN-12: Adding loading indicator during AI processing (2 Story Points)
- USN-13: Displaying a random historical fact during loading (2 Story Points)
- USN-14: Implementing input validation and error handling (3 Story Points)

Total for Epic 4: 7 Story Points

#### **Epic 5: Testing and Deployment**

This epic ensured system reliability and proper execution.

##### **Stories under this epic:**

- USN-15: Functional testing of AI artifact description generation (3 Story Points)
- USN-16: Local deployment setup and documentation (2 Story Points)

Total for Epic 5: 5 Story Points

#### **Total Story Points in Sprint 2**

$8 + 7 + 5 = 20$  Story Points

#### **Overall Calculation**

Total Story Points Completed =  $19 + 20 = 39$

Number of Sprints = 2

Velocity = Total Story Points / Number of Sprints

Velocity =  $39 / 2$

Velocity =  $19.5 \approx 19\text{--}20$  Story Points per Sprint