**Project Planning – SmartSDLC**

**Date**: 25 JUNE 2025  
**Team ID**: LTVIP2025TMID31783  
**Project Name**: SmartSDLC  
**Maximum Marks**: 5

**Product Backlog, Sprint Schedule, and Estimations *(4 Marks)***

This section presents the prioritized product backlog, sprint allocations, estimated story points, and team assignments.

**Sprint-wise User Stories**

| **Sprint** | **Epic** | **User Story No.** | **User Story Description** | **Story Points** | **Priority** | **Team Member** |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint-1 | Core Setup & Layout | USN-1 | As a developer, I can set up the Streamlit UI with tabbed navigation for core features. | 3 | High | Paleti Ram Prasad |
| Sprint-1 | File Handling | USN-2 | As a user, I can upload a PDF and extract text for processing. | 2 | High | P Harika |
| Sprint-1 | AI API Setup | USN-3 | As a developer, I can integrate Google Gemini API to simulate SDLC classification. | 3 | High | Paleti Ram Prasad |
| Sprint-2 | Classification Logic | USN-4 | As a user, I can classify document content into SDLC phases using the AI model. | 3 | High | Rayapudi Ramya Sri |
| Sprint-2 | Feedback System | USN-5 | As a user, I can correct AI-classified SDLC phases via dropdown and log feedback. | 3 | Medium | P Harika |
| Sprint-3 | Visualization | USN-6 | As a user, I can see the SDLC phase distribution chart on a dashboard. | 3 | Medium | Pedda Giridhar |
| Sprint-3 | Text Summarization | USN-7 | As a user, I can view concise summaries of content per SDLC phase. | 2 | Low | Paleti Ram Prasad |
| Sprint-3 | Session State Mgmt | USN-8 | As a user, I can retain my session data while navigating between tabs. | 2 | Medium | Rayapudi Ramya Sri |
| Sprint-4 | Deployment | USN-9 | As a developer, I can deploy the app to Streamlit Cloud or IBM Cloud. | 3 | High | Pedda Giridhar |
| Sprint-4 | Documentation Finalization | USN-10 | As a team, we can complete and polish all project documentation for submission. | 2 | Medium | All Members |
| Sprint-4 | IBM Integration PoC | USN-11 | As a developer, I can initiate PoC integration with IBM Granite-3.3-2B-instruct. | 3 | High | Paleti Ram Prasad |

**Sprint Schedule**

| **Sprint** | **Story Points** | **Duration** | **Start Date** | **End Date** | **Completed Points** | **Release Focus** |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint-1 | 8 | 6 Days | 10 Feb | 15 Feb | 8 | Streamlit Layout + File Upload + API Setup |
| Sprint-2 | 6 | 6 Days | 16 Feb | 21 Feb | 6 | SDLC Classification + Feedback Logging |
| Sprint-3 | 7 | 6 Days | 22 Feb | 27 Feb | 7 | Charts, Summaries, Session Mgmt |
| Sprint-4 | 8 | 6 Days | 28 Feb | 04 Mar | TBD | Deployment + Final Docs + IBM PoC |

**Project Tracker, Velocity & Burndown Chart *(1 Mark)***

**Velocity Calculation:**

* **Completed Sprints**: Sprint 1 (8), Sprint 2 (6), Sprint 3 (7)
* **Average Velocity** = (8 + 6 + 7) / 3 = **7 Story Points per sprint**

This helps predict deliverability and manage scope for Sprint-4.

**Burndown Chart:**

To be maintained using **Trello**, visualizing total story points vs completed per sprint.

**Progress So Far:**

* ✅ Sprint 1: 8/8 Completed
* ✅ Sprint 2: 6/6 Completed
* ✅ Sprint 3: 7/7 Completed
* 🕓 Sprint 4: In Progress

**Tools Used**

| **Purpose** | **Tool** |
| --- | --- |
| Project Management | Trello |
| Development Environment | VS Code |
| Interface & Rapid Testing | Streamlit |
| AI Integration (Simulated) | Google Gemini API |
| Visualization | Plotly |
| Version Control | Git, GitHub |
| Testing & Validation | Manual Testing + Peer Review |

**Conclusion**

**SmartSDLC** follows a structured Agile-based sprint plan to ensure timely delivery of core features like SDLC phase detection, feedback refinement, and interactive visualization. The approach allows continuous feedback, rapid iteration, and sets a strong foundation for future enterprise integration using IBM Watson Machine Learning.