**Project Planning Phase**

**Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)**

|  |  |
| --- | --- |
| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID33878 |
| Project Name | Revolutionizing Liver Care : Predicting Liver Cirrhosis using Advanced Machine Learning Techniques |
| Maximum Marks |  |

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

| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint-1 | Data Handling | USN-1 | As a user, I can upload patient health data from an Excel or CSV file | 3 | High | [Your Team Members] |
| Sprint-1 | Data Cleaning | USN-2 | As a system, I will clean and preprocess the data (missing values, encoding) | 3 | High |  |
| Sprint-1 | Model Training | USN-3 | As a developer, I can train the ML model on liver cirrhosis dataset | 5 | High |  |
| Sprint-2 | Web Interface | USN-4 | As a user, I can input test values into a web form for prediction | 2 | High |  |
| Sprint-2 | Prediction Engine | USN-5 | As a user, I receive the risk level prediction after submitting health data | 2 | High |  |
| Sprint-2 | Alert Mechanism | USN-6 | As a system, I can send email alerts if the predicted risk is high | 2 | Medium |  |
| Sprint-3 | Database Logging | USN-7 | As a system, I log all user inputs and prediction outputs to a local/cloud DB | 2 | Medium |  |
| Sprint-3 | Admin Dashboard | USN-8 | As an admin, I can monitor prediction logs and performance analytics | 3 | Medium |  |

**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. (usually in form of Fibonacci series)

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

**Sprint 1: (5 Days)**

Data Collection

Collection of Data  **2**

Loading Data      **1**

Data Preprocessing

Handling Missing Values   **3**

Handling Categorical values  **2**

**Sprint 2 (5 Days)**

Model Building

Model Building   **5**

Testing Model    **3**

Deployment

Working HTML Pages  **3**

Flask deployment    **5**

**Total Story Points**

Sprint 1 = 8

Sprint 2 = 16

Velocity= Total Story Points Completed​/ Number of Sprints

Total story Points= 16+8 =24

No of Sprints= 2

**Velocity** = (16+8)/2= 24/2

12 (Story Points per Sprint)

**Your team’s velocity is 12 Story Points per Sprint.**