# **Project Planning Phase**

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

| Date          | 27 June 2025   |
|---------------|--|
| Team ID       | LTVIP2025TMID60884   |
| Project Name  | Revolutionizing Liver Care: Predicting Liver cirrhosis using Advanced Machine Learning Techniques. |
| Maximum Marks | 5 Marks  |

#### **Product Backlog, Sprint Schedule, and Estimation**

| Sprint   | Functional<br>Requirement (Epic) | User Story<br>Number | User Story / Task  | Story Points | Priority | Team<br>Members |
|----------|----------------------------------|----------------------|--|--------------|----------|-----------------|
| Sprint-1 | Registration                     | USN-1                | As a user, I can register with email and password to access liver health services. | 2            | High     |                 |
| Sprint-1 | Registration                     | USN-2                | As a user, I will receive a verification email after registering.                  | 1            | High     |                 |
| Sprint-1 | Health Data Upload               | USN-3                | As a patient, I can upload liver test results (e.g., ALT, AST, Bilirubin).         |              | High     |                 |
| Sprint-1 | Al-Based Prediction              | USN-4                | As a system, I will validate uploaded data and trigger the ML model.               | 2            | Medium   |                 |
| Sprint-2 | Al-Based Prediction              | USN-5                | As a patient, I will receive liver cirrhosis risk prediction after upload.         | 3            | High     |                 |
| Sprint-2 | Doctor Dashboard                 | USN-6                | As a doctor, I can view a dashboard with my patients' prediction history.          | 5 High       |          |                 |
| Sprint-2 | Health Data Upload               | USN-7                | As a patient, I can view the status of my uploaded data.                           | 2            | Medium   |                 |

#### **Project Tracker, Velocity & Burndown Chart:**

| Sprint   | Total Story<br>Points | Duration | Sprint Start Date | Sprint End Date<br>(Planned) | Story Points<br>Completed (as on<br>Planned End Date) | Sprint Release Date<br>(Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|---------------------------------|
| Sprin-1  | 20                    | 6 Days   | 6 Jun 2025        | 11 Jun 2025                  | 20  | 11 Jun 2025                     |
| Sprint-2 | 20                    | 6 Days   | 12 Jun 2025       | 17 Jun 2025                  |   |                                 |
| Sprint-3 | 20                    | 6 Days   | 18 Jun 2025       | 23 Jun 2025                  |   |                                 |
| Sprint-4 | 20                    | 6 Days   | 24 Jun 2025       | 30 Jun 2025                  |   |                                 |
|          |                       |          |                   |                              |   |                                 |

### **Velocity Calculation**

**Velocity = Story Points Completed / Sprint Duration Sprint-1:** 

**Completed 8 points in 6 days** → **Velocity = 1.33 story points/day** 

If this trend continues, the team average velocity = 1.33 story points/day

### **Burndown Chart (Description)**

X-Axis: Sprint Days (e.g., Day 1 to Day 6)

Y-Axis: Story Points Remaining

Start with 8 story points on Day 1

Ideal line: linear decrease from 8 to 0 by Day 6

Actual line: updated daily, showing real progress

# **Example:**

