# **Project Planning Phase**

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

| Date          | 18 October 2022  |
|---------------|--|
| Team ID       | PNT2022TMID27580   |
| Project Name  | Project - Smart Lender- Applicant Credibility Prediction for Loan Approval |
| Maximum Marks | 8 Marks  |

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

Use the below template to create product backlog and sprint schedule

| Sprint   | Functional<br>Requirement<br>(Epic) | User<br>Story<br>Number | User Story / Task            | Story<br>Points | Priority | Team Members  |
|----------|-------------------------------------|-------------------------|------------------------------|-----------------|----------|---|
| Sprint-1 | Dataset                             | USN-4                   | Downloading the dataset      | 1               | High     | KEERTHI A<br>VINOTH S<br>NISHAANTH N K<br>ARAVIND R |
| Sprint-1 |                                     | USN-5                   | Visualizing the dataset      | 2               | Low      | KEERTHI A<br>VINOTH S<br>NISHAANTH N K<br>ARAVIND R |
| Sprint-2 |                                     | USN-6                   | Pre-process the dataset      | 3               | Medium   | KEERTHI A<br>VINOTH S<br>NISHAANTH N K<br>ARAVIND R |
| Sprint-1 | Machine<br>Learning<br>Model        | USN-7                   | KNN model building           | 5               | High     | KEERTHI A<br>VINOTH S<br>NISHAANTH N K<br>ARAVIND R |
| Sprint-2 |                                     | USN-8                   | Decision Tree model building | 5               | High     | KEERTHI A<br>VINOTH S<br>NISHAANTH N K              |

| Sprint   | Functional<br>Requirement<br>(Epic) | User<br>Story<br>Number | User Story / Task   | Story<br>Points | Priority | Team Members  |
|----------|-------------------------------------|-------------------------|---|-----------------|----------|---|
|          |                                     |                         |   |                 |          | ARAVIND R   |
| Sprint-2 |                                     | USN-9                   | Naive Bayes model building                                      | 5               | High     | KEERTHI A VINOTH S NISHAANTH N K ARAVIND R          |
| Sprint-2 |                                     | USN-10                  | Fine Tuning the model   | 3               | Low      | KEERTHI A<br>VINOTH S<br>NISHAANTH N K<br>ARAVIND R |
| Sprint-2 |                                     | USN-11                  | Evaluation and saving of the models                             | 5               | High     | KEERTHI A VINOTH S NISHAANTH N K ARAVIND R          |
| Sprint-3 | Customer User<br>Interface          | USN-12                  | Model Integration with flask                                    | 5               | High     | KEERTHI A VINOTH S NISHAANTH N K ARAVIND R          |
| Sprint-3 |                                     | USN-1                   | 1 As a user, I should be able to access the dashboard           | 3               | Medium   | KEERTHI A VINOTH S NISHAANTH N K ARAVIND R          |
| Sprint-3 |                                     | USN-2                   | Select the type of loan   | 3               | Low      | KEERTHI A VINOTH S NISHAANTH N K ARAVIND R          |
| Sprint-3 |                                     | USN-3                   | Fill the application and check the eligibility of loan approval | 5               | High     | KEERTHI A<br>VINOTH S<br>NISHAANTH N K<br>ARAVIND R |
| Sprint-4 | Deployed the website                | USN-13                  | Register on IBM Cloud   | 3               | Low      | KEERTHI A<br>VINOTH S<br>NISHAANTH N K<br>ARAVIND R |
| Sprint-4 |                                     | USN-14                  | Train the ML model on IBM Cloud                                 | 5               | Medium   | KEERTHI A   |

| Sprint   | Functional<br>Requirement<br>(Epic) | User<br>Story<br>Number | User Story / Task               | Story<br>Points | Priority | Team Members                               |
|----------|-------------------------------------|-------------------------|---------------------------------|-----------------|----------|--|
|          |                                     |                         |                                 |                 |          | VINOTH S<br>NISHAANTH N K<br>ARAVIND R     |
| Sprint-4 |                                     | USN-15                  | Deploy the website on IBM cloud | 8               | High     | KEERTHI A VINOTH S NISHAANTH N K ARAVIND R |

# Project Tracker, Velocity & Burndown Chart: (4 Marks)

| Sprint   | Total Story<br>Points | Duratio<br>n | Sprint Start<br>Date | Sprint End Date<br>(Planned) | Story Points<br>Completed (as on<br>Planned End Date) | Sprint Release Date<br>(Actual) |
|----------|-----------------------|--------------|----------------------|------------------------------|---|---------------------------------|
| Sprint-1 | 11                    | 6 Days       | 24 Oct 2022          | 29 Oct 2022                  | 20  | 29 Oct 2022                     |
| Sprint-2 | 18                    | 6 Days       | 31 Oct 2022          | 05 Nov 2022                  | 18  | 05 Nov 2022                     |
| Sprint-3 | 16                    | 6 Days       | 07 Nov 2022          | 12 Nov 2022                  | 16  | 12 Nov 2022                     |
| Sprint-4 | 16                    | 6 Days       | 14 Nov 2022          | 19 Nov 2022                  | 16  | 19 Nov 2022                     |

#### **Velocity:**

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

#### **Our Project velocity**

Sprint-1 = 11/6 = 1.833

Sprint-2 = 18/6 = 3

Sprint-3 = 16/6 = 2.67

Sprint-4 = 16/6 = 2.67

Total Velocity = 61/24 = 2.54

#### **Burndown Chart:**

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

### Burndown Chart

