



## **Initial Project Planning Template**

| Date          | 15 March 2024                          |
|---------------|--|
| Team ID       | 738303                                 |
| Project Name  | Machine Learning Approach For Employee |
|               | Performance Prediction                 |
| Maximum Marks | 4 Marks                                |

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

| Sprint   | Functional      | <b>User Story</b> | User Story / Task                       | Story         | Priority | Team    | Sprint     | Sprint End |
|----------|-----------------|-------------------|---|---------------|----------|---------|------------|------------|
|          | Requirement     | Number            |   | <b>Points</b> |          | Members | Start Date | Date       |
|          | (Epic)          |                   |   |               |          |         |            | (Planned)  |
| Sprint-1 | Data Collection | USN-1             | Gathering relevant data aligned with    | 1             | Low      | 3       | 27-04-2024 | 30-04-2024 |
|          | Collection      |                   | specific objectives of the Machine      |               |          |         |            |            |
|          |                 |                   | Learning Approach For                   |               |          |         |            |            |
|          |                 |                   | Performace Prediction .                 |               |          |         |            |            |
|          |                 |                   | project                                 |               |          |         |            |            |
| Sprint-3 | Visualizing     | USN-2             | 1) To gain insights from the data       | 3             | Medium   | 3       | 27-04-2024 | 02-05-2024 |
|          | And             |                   | and understand its characteristics.     |               |          |         |            |            |
|          | Analyzing       |                   |   |               |          |         |            |            |
|          | Data            |                   | 2) To identify patterns, trends,        |               |          |         |            |            |
|          |                 |                   | outliers, and relationships within the  |               |          |         |            |            |
|          |                 |                   | dataset.                                |               |          |         |            |            |
| Sprint-1 | Data Pre-       | USN-3             | Data preprocessing plays a pivotal role | 1             | High     | 3       | 27-04-2024 | 27-04-2024 |
|          | processing      |                   | in machine learning by transforming     |               |          |         |            |            |
|          |                 |                   | raw data into a clean, reliable, and    |               |          |         |            |            |
|          |                 |                   | structured format.                      |               |          |         |            |            |





| Sprint-2 | Model    | USN-4 | Model building in machine learning is | 2 | High | 3 | 27-04-2024 | 05-05-2024 |
|----------|----------|-------|---------------------------------------|---|------|---|------------|------------|
|          | Building |       | a critical step where algorithms are  |   |      |   |            |            |

| Sprint   | Functional<br>Requirement<br>(Epic) | User Story<br>Number | User Story / Task   | Story<br>Points | Priority | Team<br>Members | Sprint<br>Start Date | Sprint End Date (Planned) |
|----------|-------------------------------------|----------------------|---|-----------------|----------|-----------------|----------------------|---------------------------|
|          |                                     |                      | trained on historical data to create predictive models.                       |                 |          |                 |                      |                           |
| Sprint-3 | Application<br>Bulding              | USN-5                | Incorporating machine learning into applications can enhance user experience. | 3               | Medium   | 3               | 27-04-2024           | 05-05-2024                |

## Jira Screenshots:





|  |           | APR | MAY                                  | JUN |  |
|--|-----------|-----|--------------------------------------|-----|--|
| Sprints  |           |     | MLAF                                 |     |  |
| ▼ MLAFEPP-1 Data Collection                              | DONE      |     | 0                                    |     |  |
| ■ MLAFEPP-2 Download The Dataset                         | DONE BA   |     | ✓ Q MLAFEPP Sprint 1 ···             |     |  |
| ▼ MLAFEPP-3 Visualizing And Analyzing The data           | DONE      |     | CLOSED SPRINT  Sprint goal goes here |     |  |
| MLAFEPP-5 Read The Dataset                               | DONE OK   |     | Sprint goal goes here                |     |  |
| ■ MLAFEPP-4 Importing The Libraries                      | DONE DK   |     | Sprint start Sprint end              |     |  |
| MLAFEPP-6 Correlation Analysis                           | DONE DE   |     | 2024/04/27 2024/04/30                |     |  |
| ■ MLAFEPP-7 Descriptive Analysis                         | DONE OK   |     | > Q MLAFEPP Sprint 2 ···             |     |  |
| ✓ ✓ MLAFEPP-8 Data Pre-Processing                        | DONE      |     | CLOSED SPRINT                        |     |  |
| MLAFEPP-9 Checking For Null Vlaues                       | DONE BA   |     | 1                                    |     |  |
| ■ MLAFEPP-10 Handling Date And Department Column         | DONE (BA  |     | > Q MLAFEPP Sprint 3 ···             |     |  |
| ■ MLAFEPP-11 Handling Categorical Values                 | DONE BA   |     | CLOSED SPRINT                        |     |  |
| ■ MLAFEPP-12 Splitting Data Into Train And Split         | DONE (BA) |     |                                      |     |  |
| ▼ MLAFEPP-13 Model Building                              | DONE      |     |                                      |     |  |
| MLAFEPP-14 Linear Regression Model                       | DONE P    |     |                                      |     |  |
| ■ MLAFEPP-15 Random Forest Model                         | DONE P    |     |                                      |     |  |
| ■ MLAFEPP-16 Xgboost Model                               | DONE D    |     |                                      |     |  |
| MLAFEPP-17 Compare The Model                             | DONE P    |     |                                      |     |  |
| ■ MLAFEPP-18 Evaluating The Performance Of The Model And | Sa DONE   |     |                                      |     |  |
|  |           |     |                                      |     |  |
| MLAFEPP-19 Application Building                          | DONE      |     |                                      |     |  |
| MLAFEPP-20 Building HTML Pages                           | DONE OR   |     |                                      |     |  |
| ■ MLAFEPP-21 Build Python Code                           | DONE OR   |     |                                      |     |  |
| ■ MLAFEPP-23 Output                                      | DONE OR   |     |                                      |     |  |
| ■ MLAFEPP-22 Run The Application                         | DONE OF   |     |                                      |     |  |