

## Project Planning Phase

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

|               |  |
|---------------|--|
| Team ID       | PNT2022TMID01511   |
| Project Name  | Early Detection of Chronic Kidney Disease using Machine Learning |
| 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 Requirement (Epic) | User Story Number | User Story / Task  | Story Points | Priority | Team Members   |
|----------|-------------------------------|-------------------|--|--------------|----------|--|
| Sprint-1 | User Registration             | USN-1             | As a user, I can register for the application by entering my name, mobile number, email, password, and confirming my password. | 10           | High     | Aravindasamy K<br>Rajesh D<br>Vetriselvan B<br>Vinothkumar A |
| Sprint-2 |                               | USN-2             | As a user, I can register for the application through Gmail  | 5            | Medium   | Aravindasamy K<br>Rajesh D<br>Vetriselvan B<br>Vinothkumar A |
| Sprint-1 | User Confirmation             | USN-3             | As a user, I will receive confirmation email once I have registered for the application  | 10           | High     | Aravindasamy K<br>Rajesh D<br>Vetriselvan B<br>Vinothkumar A |
| Sprint-2 |                               | USN-4             | As a user, I will receive confirmation otp to verify the identity.   | 5            | High     | Aravindasamy K<br>Rajesh D<br>Vetriselvan B<br>Vinothkumar A |
| Sprint-2 | Data Collection               | USN-5             | As a user, I will enter the input data for disease prediction in the form  | 10           | High     | Aravindasamy K<br>Rajesh D<br>Vetriselvan B<br>Vinothkumar A |

| Sprint   | Functional Requirement (Epic) | User Story Number | User Story / Task  | Story Points | Priority | Team Members   |
|----------|-------------------------------|-------------------|--|--------------|----------|--|
| Sprint-3 | Provide output to the user    | USN-6             | As a user, I will get the result of disease prediction in the dashboard.   | 10           | High     | Aravindasamy K<br>Rajesh D<br>Vetriselvan B<br>Vinothkumar A |
| Sprint-3 | Data Analysis                 | USN-7             | As the admin, I will develop modules to preprocess and store the data.     | 10           | High     | Aravindasamy K<br>Rajesh D<br>Vetriselvan B<br>Vinothkumar A |
| Sprint-4 | Prediction of disease         | USN-8             | As the admin, I will build a Machine Learning model to predict the disease | 10           | High     | Aravindasamy K<br>Rajesh D<br>Vetriselvan B<br>Vinothkumar A |
| Sprint-4 | Final Delivery                | USN-9             | Deploy the application in IBM cloud and make it available for use.         | 10           | High     | Aravindasamy K<br>Rajesh D<br>Vetriselvan B<br>Vinothkumar A |

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

| Sprint   | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date (Actual) |
|----------|--------------------|----------|-------------------|---------------------------|---|------------------------------|
| Sprint-1 | 20                 | 6 Days   | 24 Oct 2022       | 29 Oct 2022               |   |                              |
| Sprint-2 | 20                 | 6 Days   | 31 Oct 2022       | 05 Nov 2022               |   |                              |
| Sprint-3 | 20                 | 6 Days   | 07 Nov 2022       | 12 Nov 2022               |   |                              |
| Sprint-4 | 20                 | 6 Days   | 14 Nov 2022       | 19 Nov 2022               |   |                              |

#### Velocity:

We have a 6-day sprint duration, and the velocity of the team is 20 (points per sprint). The team's average velocity (AV) per iteration unit (story points per day)

$$AV = \text{Sprint duration} / \text{velocity} = 20 / 6 = 3.33$$

## Burndown Chart

