# **Project Planning Phase**

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

| Date          | 29 October 2022  |
|---------------|--|
| Team ID       | PNT2022TMID32832   |
| Project Name  | Project - Detecting Parkinson's 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 User Story User Story / Task Requirement (Epic) Number |       | Story Points   | Priority | Team<br>Members |               |
|----------|---|-------|--|----------|-----------------|---------------|
| Sprint-3 | Home Page   | USN-1 | Description about the Parkinson's disease.   | 2        | Low             | Harini S      |
| Sprint-3 |   | USN-2 | Details about the symptoms of the user is 1 Low required.  |          | Low             | Samyuktha C   |
| Sprint-3 | Registration  | USN-3 | As a user, I can register to the web application by entering my username, email, phone number, and password, and confirming my password. |          | Moderate        | Harini S      |
| Sprint-3 |   | USN-4 | As a user, I will receive a confirmation mail once I have signed up.   | 5        | High            | Nishanthini   |
| Sprint-2 | Login   | USN-5 | As a user, I can log in to the web application by entering my email id & password.   | 2        | High            | Samyuktha C   |
| Sprint-4 | Main Page(Test vitals)  | USN-6 | As a user, I submit the symptoms and the medical history required for the prediction.  | 2        | Moderate        | Aswini Devi B |
| Sprint-4 | Results   | USN-7 | Results will be displayed along with their 3 accuracy.   |          | High            | Nishanthini S |
| Sprint-1 | Data collection   | USN-8 | Collect the required data for the detection of 1 High Parkinson's disease  |          | High            | Aswini Devi B |
| Sprint-1 | Data preprocessing  | USN-9 | Clean and analyze the data to avoid noise and duplications   | 1        | High            | Aswini Devi B |

| Sprint   | Functional<br>Requirement (Epic)         | User Story<br>Number | User Story / Task  | Story Points | Priority | Team<br>Members |
|----------|--|----------------------|--|--------------|----------|-----------------|
| Sprint-1 | Model Building                           | USN-10               | Build the model using a Random forest classifier and HOG to classify the images. | 2            | High     | Samyuktha C     |
| Sprint-2 | Deploy the model                         | USN-11               | Deployment of ML model using IBM Watson  | 2            | High     | Harini S        |
| Sprint-2 | Integrate the web app with the IBM model | USN-12               | Usage of flask for the integration purpose                                       | 2            | Moderate | Nishanthini S   |

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

| Sprint   | Total Story<br>Points | Duration | Sprint Start Date | Sprint End Date<br>(Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date<br>(Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|---------------------------------|
| Sprint-1 | 4                     | 6 Days   | 24 Oct 2022       | 29 Oct 2022                  | 4   | 29 Oct 2022                     |
| Sprint-2 | 6                     | 6 Days   | 31 Oct 2022       | 05 Nov 2022                  | 6   | 05 Nov 2022                     |
| Sprint-3 | 10                    | 6 Days   | 07 Nov 2022       | 12 Nov 2022                  | 10  | 12 Nov 2022                     |
| Sprint-4 | 5                     | 6 Days   | 14 Nov 2022       | 19 Nov 2022                  | 5   | 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)

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