

## Project Planning Phase

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

|               |   |
|---------------|---|
| Date          | 18 October 2022                                       |
| Team ID       | PNT2022TMID07703                                      |
| Project Name  | AI-Powered Nutrition Analyzer For Fitness Enthusiasts |
| Maximum Marks | 8 Marks   |

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

| Sprint   | Functional Requirement (Epic) | User Story Number | User Story / Task   | Story Points | Priority | Team Members   |
|----------|-------------------------------|-------------------|---|--------------|----------|--|
| Sprint-1 | Data Collection               | USN-1             | Dataset - Collecting images of food items (apples , banana, orange, pineapple, watermelon for analysis)       | 5            | High     | Viswanathan S<br>Elakkiya D                                    |
| Sprint-1 | Image Preprocessing           | USN-2             | Import the image data generator library   | 4            | Medium   | Dharanidharan.K<br>Harinisree.S<br>Viswanathan S<br>Elakkiya D |
| Sprint-1 |                               | USN-3             | Image Data Generator Class –<br>configure image data agenerator class   | 4            | Medium   | Dharanidharan.K<br>Harinisree.S                                |
| Sprint-1 |                               | USN-4             | Applying image data generator<br>functionality to train set and test set                                      | 4            | Medium   | Dharanidhara.K<br>Harinisree.S                                 |
| Sprint-2 | Modeling Phase                | USN-5             | Defining the model architecture - Building<br>the model using deep learning approach<br>and adding CNN layers | 4            | High     | Viswanathan S<br>Elakkiya D                                    |
| Sprint-2 |                               | USN- 6            | Test ,train ,save the model   | 4            | High     | Dharanidharan.K<br>Harinisree.S<br>Viswanathan S<br>Elakkiya D |

| <b>Sprint</b> | <b>Functional Requirement (Epic)</b> | <b>User Story Number</b> | <b>User Story / Task</b>  | <b>Story Points</b> | <b>Priority</b> | <b>Team Members</b>  |
|---------------|--------------------------------------|--------------------------|---|---------------------|-----------------|--|
| Sprint-3      | Application Phase                    | USN- 7                   | Building the python code and importing the flask module into the Project                        | 6                   | High            | Dharanidharan.K<br>Harinisree.S                                |
| Sprint-3      |                                      | USN- 8                   | Create the Flask application and loading the model  | 4                   | High            | Dharanidharan.K<br>Harinisree.S<br>Viswanathan S<br>Elakkiya D |
| Sprint-4      | Application Phase                    | USN- 9                   | API integration - Connecting front end and back end and perform routing and run the application | 5                   | High            | Dharanidharan.K<br>Harinisree.S<br>Viswanathan S<br>Elakkiya D |
| Sprint-4      | Deployment Phase                     | USN-10                   | Cloud deployment – Deployment of application by using IBM cloud                                 | 5                   | High            | Dharanidharan.K<br>Harinisree.S<br>Viswanathan S<br>Elakkiya D |

**Project Tracker, Velocity & Burn down Chart: (4 Marks)**

| <b>Sprint</b> | <b>Total Story Points</b> | <b>Duration</b> | <b>Sprint Start Date</b> | <b>Sprint End Date (Planned)</b> | <b>Story Points Completed (as on Planned End Date)</b> | <b>Sprint Release Date (Actual)</b> |
|---------------|---------------------------|-----------------|--------------------------|----------------------------------|--|-------------------------------------|
| Sprint-1      | 17                        | 5 Days          | 29 Oct 2022              | 02 Nov 2022                      | 20   | 3 Nov 2022                          |
| Sprint-2      | 08                        | 5 Days          | 03 Oct 2022              | 07 Nov 2022                      | 20   | 8 Nov 2022                          |
| Sprint-3      | 10                        | 5 Days          | 08 Nov 2022              | 12 Nov 2022                      | 20   | 11 Nov 2022                         |
| Sprint-4      | 10                        | 5 Days          | 13 Nov 2022              | 17 Nov 2022                      | 20   | 16 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)

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

**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 suchas Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

# Sprint planning

