**Project Planning Phase**

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

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| Date | 25 October 2022 |
| Team ID | PNT2022TMID40800 |
| Project Name | AI-powered Nutrition Analyzer for Fitness Enthusiasts |
| Maximum Marks | 8 marks |

Product Backlog, Sprint Schedule, and Estimation

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| **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 | 8 | High | Aravindkumar.s |
| Sprint-1 | Image Preprocessing | USN-2 | Image data augmentation - Increasing the  amount of data by generating new data points from existing data | 4 | medium | Karthikeyan.R |
| Sprint-1 | USN-3 | Image Data Generator Class - Used for getting the input of the original data | 4 | medium | Muralikrishnan.T |
| Sprint-1 | USN-4 | Applying image data generator functionality to train set and test set | 4 | Medium |  |
| Sprint-2 | Modeling Phase | USN-5 | Defining the model architecture - Building the model using deep learning approach and adding CNN layers | 4 | High | Manikandan.R |
| Sprint-2 | USN -6 | Training , saving, testing and predicting the  model | 5 | High | Aravindkumar.S |
| Sprint-2 | USN- 7 | Database creation for the input classes | 4 | High | Karthikeyan.R |

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| **Sprint** | **Functional**  **Requirement (Epic)** | **User Story**  **Number** | **User Story / Task** | **Story Points** | **Priority** | **Team**  **Members** |
| Sprint- 2 | Development phase | USN- 8 | User database creation - It contains the details of users | 3 | Medium | Muralikrishnan.T |
| Sprint-2 | USN- 9 | Home page creation - It shows options of the application | 2 | Low | Manikandan.R |
| Sprint-2 | USN- 10 | Login and registration page creation - User can register and login through g mail with Id and password | 2 | Low | Aravindkumar.S |
| Sprint-3 | USN- 11 | Dashboard creation – Dashboard contains  the information of user profile and features of the application | 2 | Low | Karthikeyan.R |
| Sprint-3 | USN- 12 | User Input Page Creation - It is for the user to feed the input images | 4 | medium | Muralikrishnan.t |
| Sprint-3 | USN- 13 | Analysis and prediction page creation - It shows the prediction of given user input | 4 | Medium | Manikandan.R |
| Sprint-3 | USN- 14 | Creation of about us , feedback and rating page – It shows application history and feedback page to users | 4 | medium | Aravindkumar.s |
| Sprint-3 | Application Phase | USN- 15 | Building the python code and importing the flask module into the  Project | 6 | high | Karthikeyan.r |
| Sprint-4 | USN- 16 | Create the Flask application and loading the model | 5 | high | Muralikrishnan.t |
| Sprint-4 | USN- 17 | API integration - Connecting front end and back end and perform routing and run the application | 5 | high | Manikandan.r |
| Sprint-4 | Deployment Phase | USN-18 | Cloud deployment – Deployment of application by using IBM cloud | 4 | high | Karthikeyan.r |

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| **Sprint** | **Functional**  **Requirement (Epic)** | **User Story**  **Number** | **User Story / Task** | **Story Points** | **Priority** | **Team**  **Members** |
| Sprint-4 | Testing Phase | USN-19 | Functional testing – Checking usability and accessibilty | 3 | medium | Aravindkumar.s |
| USN-20 | Non Functional testing – Checking scalability and performance of the  application | 3 | medium | Muralikrishnan.t |

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

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| --- | --- | --- | --- | --- | --- | --- |
| **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 | 08 | 5 Days | 29 Oct 2022 | 02 Nov 2022 | 20 | 2 Nov 2022 |
| Sprint-2 | 15 | 5 Days | 03 Oct 2022 | 07 Nov 2022 | 20 | 7 Nov 2022 |
| Sprint-3 | 15 | 5 Days | 08 Nov 2022 | 12 Nov 2022 | 20 | 12 Nov 2022 |
| Sprint-4 | 25 | 5 Days | 13 Nov 2022 | 17 Nov 2022 | 20 | 17 Nov 2022 |

**Velocity:**

Average Velocity= 12/4 =3