

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

|               |   |
|---------------|---|
| Date          | 18 October 2022                           |
| Team ID       | PNT2022TMID21554                          |
| Project Name  | Analytics for Hospital's Health Care Data |
| Maximum Marks | 8 Marks                                   |

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

Use the below template to create product backlog and sprint schedule

| <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-1      | Analysing , Visualizing , and Data Preparation Hospital health care data | USN-1                    | As a user, I want to collect the details regarding to hospitals data<br>As a patient, I want to visualize the hospital health care data. | 10                  | Medium          | Shujat Hussain,<br>Sri Ram Prasad S |
| Sprint-1      |  | USN-2                    | As a patient, I want to load the data, and data has to be prepared   | 5                   | Medium          | Surya S,<br>Namgail Dorjay          |
| Sprint-2      | Exploration of data  | USN-3                    | As a patient/user I want to explore all the details in the given in the dataset  | 3                   | Medium          | Sri Ram Prasad S,                   |

|           |                   |       |  |   |      |                              |
|-----------|-------------------|-------|--|---|------|------------------------------|
| Sprint -2 |                   | USN-4 | As a user, I want to visualize all the details in the dataset in different formats   | 2 | Low  | Namgail Dorjay               |
| Sprint-3  | Prediction of LOS | USN-5 | As a patient/user I want an interactive dashboard to understand the data easily<br><br>As a patient, I want to predict length of stay in the hospitals | 7 | High | Sri Ram Prasad S,<br>Surya S |

|          |   |        |   |   |        |                                  |
|----------|---|--------|---|---|--------|----------------------------------|
| Sprint-4 | Monitoring user response and Model Accuracy | USN -6 | As a Patient, I want to monitor the model/system accuracy | 5 | Medium | Surya S                          |
| Sprint-4 | Admin Dashboard                             | USN-7  | As an admin I want to create a report.                    | 2 | Medium | Shujat Hussain, Sri Ram Prasad S |

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

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

| 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 | 15                 | 6 Days   | 24 Oct 2022       | 29 Oct 2022               | 10  |                              |
| Sprint-2 | 10                 | 6 Days   | 31 Oct 2022       | 05 Nov 2022               | 20  |                              |
| Sprint-3 | 13                 | 6 Days   | 07 Nov 2022       | 12 Nov 2022               | 20  |                              |
| Sprint-4 | 15                 | 6 Days   | 14 Nov 2022       | 19 Nov 2022               | 20  |                              |

### 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)

| Sprint    | Total Story points | Sprint duration | Average velocity |
|-----------|--------------------|-----------------|------------------|
| Sprint -1 | 15                 | 6 days          | $15/6=2.5$       |
| Sprint -2 | 10                 | 6 days          | $10/6=1.67$      |
| Sprint -3 | 13                 | 6 days          | $13/6=2.16$      |
| Sprint -4 | 15                 | 6 days          | $15/6=2.5$       |

### 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 such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time. <https://www.visual-paradigm.com/scrum/scrum-burndown-chart/> <https://www.atlassian.com/agile/tutorials/burndown-charts>

**Reference:** <https://www.atlassian.com/agile/projectmanagement>  
<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>  
<https://www.atlassian.com/agile/tutorials/epics> <https://www.atlassian.com/agile/tutorials/sprints>  
<https://www.atlassian.com/agile/projectmanagement/estimation>  
<https://www.atlassian.com/agile/tutorials/burndown-charts>