

## Project Planning Phase

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

#### 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 | Registration                  | USN-1             | As a user, I will be able to register my application by entering my email, password, and confirming my password. | 2            | High     | Raghavi V      |
| Sprint-1 |                               | USN-2             | As a user, I will be able to receive an email confirmation after registration.                                   | 1            | High     | Raghul P       |
| Sprint-2 |                               | USN-3             | As a user, I can register for the application through Gmail.   | 2            | Low      | Ashwin K       |
| Sprint-1 |                               | USN-4             | As a user, I can register for the application by entering details by self.                                       | 2            | Medium   | Pradeshwaran P |
| Sprint-1 | Login                         | USN-5             | As a user, I can log into the application by entering email & password   | 1            | High     | Raghavi V      |
|          | Dashboard                     |                   |  |              |          |                |

**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               | 20  | 29 Oct 2022                  |
| Sprint-2 | 20                 | 6 Days   | 30 Oct 2022       | 02 Sept 2022              | 20  | 31 Oct 2022                  |
| Sprint-3 | 20                 | 6 Days   | 01 Sept 2022      | 07 Sept 2022              | 20  | 05 Sept 2022                 |
| Sprint-4 | 20                 | 6 Days   | 06 Sept 2022      | 15 Sept 2022              | 20  | 12 Sept 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)

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

**Burndown Chart:**

A burndown 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>

**References:**

<https://www.atlassian.com/agile/project-management>

<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>

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<https://www.atlassian.com/agile/tutorials/burndown-charts>