

Project Planning Phase

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

| | |
|---------------|---|
| Team ID | PNT2022TMID29705 |
| Project Name | Project – Real Time River Water Quality Monitoring And Control System |
| 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 Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|---|--------------|----------|-------------------|
| Sprint-1 | Registration | USN-1 | As a user, I can register for the application by entering my email, password, and confirming my password. | 2 | High | Mohanraj. D |
| Sprint-1 | | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 1 | High | Mohanraj. D |
| Sprint-1 | | USN-3 | Login through the website | 2 | Low | Mohanraj. D |
| Sprint-1 | | USN-4 | As a user, I can register for the application through Gmail | 2 | Medium | Mohanraj .D |
| Sprint-1 | Login | USN-5 | As a user, I can log into the application by entering email & password | 1 | High | Teena Kumari. M |
| Sprint-1 | Dashboard | USN-6 | As a user home icon is available and can access menu | 1 | High | Santhosh kumar. J |
| Sprint-1 | Option icon | USN-7 | Display Data and chart | 2 | High | Surender. D |
| Sprint-2 | Node red | USN-8 | Connection establishment | 1 | High | Santhosh kumar. J |
| Sprint-2 | Event creation | USN-9 | Program each sensor | 2 | High | Santhosh kumar. J |
| Sprint-2 | Testing | USN-9 | Observe the data | 2 | High | Mohanraj .D |

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|---------------------------|--------------|----------|-----------------|
| Sprint-3 | Circuit wokwi | USN-10 | Build circuit in node red | 2 | High | Mohanraj .D |
| Sprint-3 | Testing | USN-11 | Code testing | 2 | High | Mohanraj .D |
| Sprint-4 | MIT app code | USN-12 | Backend coding | 2 | High | Surender. D |
| Sprint-4 | | USN-13 | Testing code | 2 | High | Teena Kumari. M |
| Sprint-4 | | USN-14 | Testing overall app | 2 | High | Teena Kumari. M |

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 | 4 Days | 01 Nov 2022 | 04 Nov 2022 | 20 | 06 Nov 2022 |
| Sprint-2 | 20 | 4 Days | 04 Nov 2022 | 08 Nov 2022 | 20 | 11 Nov 2022 |
| Sprint-3 | 20 | 4 Days | 08 Nov 2022 | 12 Nov 2022 | 20 | 14 Nov 2022 |
| Sprint-4 | 20 | 4 Days | 12 Nov 2022 | 19 Nov 2022 | 20 | 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

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

velocity (AV) per iteration unit (story points per day)

AV=Sprint duration/ velocity =20/4=5

Table:

| scrumdown chart | | | | | | | | |
|-----------------|--|---------|--|----------|--|---------|--|---------|
| | | | | | | | | |
| | | sprint1 | | sprint 2 | | sprint3 | | sprint4 |
| Days | | 0 | | 4 | | 8 | | 12 |
| Base points | | 20 | | 20 | | 20 | | 20 |
| actual points | | 20 | | 17 | | 12 | | 10 |
| | | | | | | | | |
| | | | | | | | | |

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.

