Project Planning Phase

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

| Date | 22 October 2022 |
|---------------|---|
| Team ID | PNT2022TMID30240 |
| Project Name | Hazardous Area Monitoring for Industrial Plant powered by IoT |
| Maximum Marks | 8 Marks |

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

| Sprint | rint Functional User Story User Story / Task Requirement (Epic) Number | | Story Points | Priority | Team Members | |
|----------|--|---|--|----------|--------------|----------------|
| Sprint-1 | Installation | USN-1 | The technician must install the smart beacons at points to ensure the entire area of the plant is covered. | 3 | Medium | Devakumar M |
| Sprint-1 | Data Gathering | USN-2 | The beacons obtain the temperature of their respective area using sensors. | 1 | Low | Devakumar M |
| Sprint-2 | Data Sync | USN-3 | The beacons send their data to the cloud in the real time which is in turn sent to nearby wearable devices and the administrators dashboard. | 3 | Medium | Udhayasankar V |
| Sprint-2 | Wearable device display | USN-4 | The wearable devices should display the data sent by beacons within the area. | 1 | Low | Udhayasankar V |
| Sprint-3 | SMS Notifications | USN-5 | The user is sent a notification to their phone from the wearable device through an API when the area they are in reaches dangerous temperatures. | 4 | High | Arunkumar S |
| Sprint-4 | Admin Dashboard | Dashboard USN-6 The beacons send the data through the cloud to a dashboard which is run by the administrator. | | 4 | High | Arvin Raj P |

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

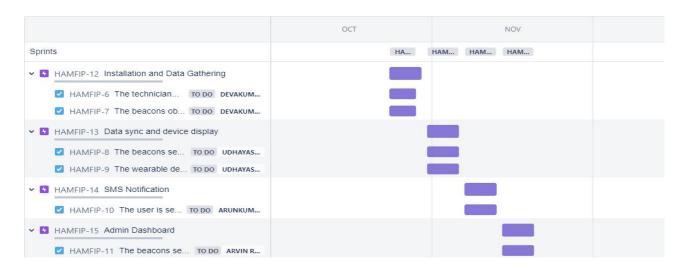
| Sprint | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date (Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|---------------------------------|
| Sprint-1 | 20 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | | |
| Sprint-2 | 20 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | | |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | | |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | | |

Velocity:

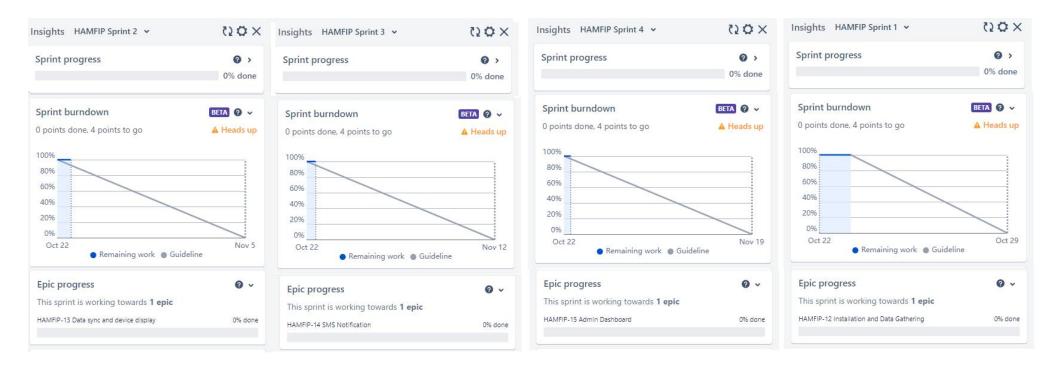
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

Roadmap



Burndown Chart:



Sprint 2Sprint 3Sprint 4Sprint 1Udhayasankar VArunkumar SArvin Raj PDevakumar S