

Project Planning Phase

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

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|---------------|---|
| Date | 20 October 2022 |
| Team ID | PNT2022TMID34131 |
| Project Name | Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy |
| 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 | Screening method | USN-1 | As a user, I can find the method more efficient and accurate. | 7 | High | Dharshine.R.S. |
| Sprint-2 | | USN-2 | As a user, I can use it with minimal physical interaction with the device. | 6 | Medium | Hassim Arsha.S |
| Sprint-4 | Physical features | USN-3 | As a user, I can find it portable and light weight. | 10 | Low | Petricia Reshmi.L. |
| Sprint-3 | Safety | USN-4 | As a user, I can be safe as the detection method is free from radiations. | 8 | High | Inba Muhil.E.S. |
| Sprint-1 | Testing | USN-5 | As a user, I can undergo testing without any fear of pain as this method is pain-free. | 7 | Low | Dharshine.R.S. & Hassim Arsha.S |
| Sprint-3 | | USN-6 | As a user, I will be comfortable as it requires minimum/no human involvement. | 3 | Medium | Inba Muhil.E.S.& Patricia Reshmi.L. |
| Sprint-1 | Results | USN-7 | As a user, I can rely on the results without any suspicion. | 6 | High | Dharshine.R.S. |

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|----------|-------------------------------|-------------------|---|--------------|----------|--------------------------------------|
| Sprint-3 | | USN-8 | As a user, I can benefit from the result as it will help me know whether treatment is necessary or not. | 8 | Medium | Inba Muhil.E.S. |
| Sprint-2 | | USN-9 | As a user, I can get the results on the spot immediately after the screening process. | 7 | Low | Hassim Arsha.S. |
| Sprint-4 | Results | USN-10 | As a user, I can complete the screening process within minutes for a single patient. | 10 | Medium | Petricia Reshmi.L. |
| Sprint-3 | Cost-effectiveness | USN-11 | As a user, I can reach many people suffering from diabetes. | 4 | Medium | Petricia Reshmi.L. & Inba Muhil.E.S. |
| Sprint-2 | | USN-12 | As a user, I can create awareness among diabetic patients to undergo frequent screening | 7 | Low | Hassim Arsha.S. & Dharshine.R.S. |

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 | 31 Oct 2022 | 05 Nov 2022 | 20 | 05 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 20 | 12 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 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 velocity (AV) per iteration unit (story points per day)

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