**Project Planning Phase**

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

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| --- | --- |
| Date | 24 October 2022 |
| Team ID | PNT2022TMID36960 |
| Project Name | Virtual Eye - Life Guard for Swimming Pools to  Detect Active Drowning |
| Maximum Marks | 8 Marks |

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

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| --- | --- | --- | --- | --- | --- | --- |
| **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. | 1 | High | Keerthana  And  Jayapreetha |
| Sprint-1 |  | USN-2 | As a user, I will receive confirmation email once I have registered for the application. | 2 | Low | Jayapreetha  And  Mouriya |
| Sprint-1 |  | USN-3 | As a user, I can register for the application through Gmail | 2 | Medium | Thamizhiniyan  And  Mahendran |
| Sprint-1 | Login | USN-4 | As a user, I can log into the application by entering email & password. | 1 | High | Keerthana  And  Mouriya |
| Sprint-1 |  | USN-5 | In prediction page, as a user, I can upload the data to detect the drowning person. | 2 | Medium | Jayapreetha  And  Mahendran |
| Sprint-1 | Dataset collection | USN-6 | We can collect number of datasets; we can get high accuracy depends on collecting the number of datasets. | 2 | High | Thamizhiniyan and  Keerthana |

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| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| Sprint-2 | Data Pre-processing | USN-7 | The dataset is extracted and is used to train the model. | 4 | High | Keerthana  And  Jayapreetha |
| Sprint-2 | Train the model | USN-8 | We will train the model. | 8 | High | Mouriya  And  Thamizhiniyan |
| Sprint-2 |  | USN-9 | We will test the model. | 6 | High | Jayapreetha  And  Mahendran |
| Sprint-3 | Detection | USN-10 | Load the trained model. | 3 | High | Keerthana  And  Mouriya |
| Sprint-3 |  | USN-11 | To identify the person by collecting real-time data through a webcam. | 5 | Medium | Keerthana  And  Jayapreetha |
| Sprint-3 |  | USN-12 | Now the real-time data to classify it by using a trained model to predict the output of the given real-time input. | 8 | High | Mouriya  And  Thamizhiniyan |
| Sprint-4 |  | USN-13 | If in case the person is drowning, the system will ring an alarm to notify for rescue the person. | 7 | High | Mouriya  And  Jayapreetha |
| Sprint-4 |  | USN-14 | As a user, I can detect the drowning person. | 3 | Medium | Jayapreetha  And  Mahendran |
| Sprint-4 | Logout | USN-15 | As a user, I can logout into the application. | 2 | Low | Keerthana  And  Jayapreetha |

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

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| --- | --- | --- | --- | --- | --- | --- |
| **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 | 10 | 6 Days | 24 Oct 2022 | 29 Oct 2022 |  | 29 Oct 2022 |
| Sprint-2 | 18 | 6 Days | 31 Oct 2022 | 05 Nov 2022 |  |  |
| Sprint-3 | 16 | 6 Days | 07 Nov 2022 | 12 Nov 2022 |  |  |
| Sprint-4 | 12 | 6 Days | 14 Nov 2022 | 19 Nov 2022 |  |  |

**Velocity:**

For Sprint-1 the Average Velocity (AV) is:

AV = Sprint Duration / velocity = 10 / 6 = 1.6

For Sprint-2 the Average Velocity (AV) is:

AV = Sprint Duration / velocity = 18 / 6 = 3.0

For Sprint-3 the Average Velocity (AV) is:

AV = Sprint Duration / velocity = 16 / 6 = 2.6

For Sprint-4 the Average Velocity (AV) is:

AV = Sprint Duration / velocity = 12/ 6 = 2.0

**TOTAL AVERAGE VELOCITY = 2.3**