

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

|               |  |
|---------------|--|
| Date          | 09 November 2022   |
| Team ID       | PNT2022TMID25952   |
| Project Name  | Project - VirtualEye - Life Guard for Swimming Pools to Detect Active Drowning |
| Maximum Marks | 4 Marks  |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task)   |
|--------|-------------------------------|--|
| FR-1   | User Registration             | Registration through Form<br>Registration through Gmail<br>Registration through LinkedIn |
| FR-2   | User Confirmation             | Confirmation via Email<br>Confirmation via OTP   |
| FR-3   | Alarm system                  | Monitor and detect the drowning person Alert the lifeguard by trigger the alarm          |
| FR-4   | Output                        | Visual representation Image detection Report generation                                  |
|        |                               |  |
|        |                               |  |

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description  |
|--------|----------------------------|--|
| NFR-1  | <b>Usability</b>           | Eco – Friendly   |
| NFR-2  | <b>Security</b>            | Observing each and every body movement of the swimmers.  |
| NFR-3  | <b>Reliability</b>         | Suitable for all the swimming pools.   |
| NFR-4  | <b>Performance</b>         | Life guard can visually access the developing situation within seconds of the event first occurring and initiate the rescue procedure when necessary |
| NFR-5  | <b>Availability</b>        | 24/7 monitoring cameras.   |
| NFR-6  | <b>Scalability</b>         | Its comfortable for all swimmers. The lifespan is high. Work more efficiently.   |

