**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 12 October 2022 |
| Team ID | PNT2022TMID00595 |
| Project Name | Lifeguard for swimming pools |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | To ensure the safety of each and every person present in the pool. A Lifeguard should be present all the time in the pool. |
| NFR-2 | **Security** | Lifeguards can detect motion at the pool gate or in the water itself. Some water breach sensors float on the water unobtrusively, whereas others mount to the side of the pool. |

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | Installation | needed to be fixed under the water without creating any disturbance to the people in the swimming pool. |
| FR-2 | Deduction | either horrified or in unconscious |
| FR-3 | Audio | ask for help or stay quiet if the person is unconscious |
| FR-4 | Support | Take swim tubes or take the help of rescuer |
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**Non-functional Requirements:**

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

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| NFR-3 | **Reliability** | Virtual eye lifeguard triggers an immediate alarm if a swimmer is in peril, helping to avoid panic even in critical situations. |
| NFR-4 | **Performance** | The alarm is triggered when there is a change in water pressure and when people are about to drown. |
| NFR-5 | **Availability** | Equipment and accessories include lifesaver rings, inflatable vests, a Shepherd's Crook, life hooks, spine boards, rescue tubes, and a first aid kit. Remember to keep them accessible to quickly pull someone from the water safely. |
| NFR-6 | **Scalability** | Virtual eye lifeguard detects potential drownings and promptly notifies you. It features the latest artificial intelligence technology and adapts to the needs of the user. |