Project Design Phase-II

Solution Requirements (Functional & Non functional)

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| Date | 11 November 2022 |
| Team ID | PNT2022TMID52122 |
| Project Name | Virtual eye – lifeguard for swimming pools for active drowning |
| Maximum Marks | 4 Marks |

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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 |
| FR-5 | Prior Alert | Send alert message to the lifeguard |

Non-functional Requirements:

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

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| **FR**  **No.** | **Non-Functional Requirement** | **Description** |

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| NFR- 1 | **Usability** | To ensure the safety of each and every person present in thepool. A Lifeguard should be present all the time in the pool. |

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| NFR- 2 | **Security** | Lifeguards should be aware of the alert message to save the life of the swimmer |
| NFR- 3 | **Reliability** | Virtual eye lifeguard triggers an immediate prior alarm if a swimmer is in peril, helping to avoid panic even in critical situations. |
| NFR- 4 | **Performance** | The alarm is triggered when the swimmer’s pulse rate is decreasing |
| NFR- 5 | **Availability** | Equipment and accessories include lifesaver rings,inflatable vests, aShepherd'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. |