# Project Design Phase-II Solution Requirements (Functional &

**Non-functional)**

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| Date | 14 October 2022 |
| Team ID | PNT2022TMID30495 |
| Project Name | Classification of arrhythmia by using deep learning with 2-d |

**Functional Requirements:**

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 | User Registration | Registration through Form Registration through Gmail  Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email Confirmation via OTP |
| FR- 3 | User interface | Check your profile Choose your file  Sign Out your account account and change your  password |
| FR- 4 | Data processing | Evaluating the model using test data Training DL algorithm for a accuracy result Trained CNN model using Tensorflow,Kearas |
| FR-5 | Predict ECG image | User ECG images in our web application Collection of datasets Database read ECG images |

# Non-functional Requirements:

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

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| **FR**  **No.** | **Non-Functiona l Requirement** | **Description** |
| NFR-1 | Usability | Wireless ECG body sensor Savvy is a feasible solution for reliable and accurate long-term heart rhythm monitoring**.**  However, there were no studies dealing with usability of this sensor in ﬁeld testing. |
| NFR-2 | Security | The work presented in this paper is applicable for encrypting and decrypting personalized Electrocardiograph ECG  signals for secure transmission. |
| NFR-3 | Reliability | The extent to the consistently performs the specified functions without failure |
| NFR-4 | Performance | It essentially specifies how the system should behave and that it constrains the ECG wavelength of accurate disease information gathering. |
| NFR-5 | Availability | Availability describes how likely the system is accessible to a user at a given point in time and the periodically for a solutions. |
| NFR-6 | Scalability | The ability of the user problem in arrhythmia disease to handle an increase in workload without performance degradation, or its ability to quickly enlarge. |