

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

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| Date | 12 October 2022 |
| Team ID | PNT2022TMID36525 |
| Project Name | Classification of arrhythmia using deep learning with 2-D ECE spectral image Representation |
| 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 Registration through Gmail Registration through LinkedIn |
| FR-2 | User Confirmation | Confirmation via Email Confirmation via OTP |
| FR-3 | User selection | Knowledge about ECG images select the image to be classified |
| FR-4 | User input | Images need to be uploaded |
| FR-5 | Save image | Images are saved in uploaded folder |
| FR-6 | Predict ECG image | User ECG images in our web application Collection of data sets Database read ECG images |

Non-functional Requirements:

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

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

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|-------|--------------------|--|
| NFR-1 | Usability | An user friendly and simple UI Web application . Easy drag and drop options |
| NFR-2 | Security | No third party web and UI is used for prediction of data Details about user interaction with the web application are protected |
| NFR-3 | Reliability | Higher accuracy rate Defect free |

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|-------|---------------------|---|
| NFR-4 | Performance | Fast and quick classification of the required class is done |
| 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 |

Submitted By:

SHANMUGAM M - 112519106004
SHARMILA R - 112519106005
VIGNESH T - 112519106006
SARANYA S - 112519106003