|  |  |  |
| --- | --- | --- |
|  | Project Design Phase – II | |
| Solution Requirements (Functional & Non-Funcitonal) | | |
|  |  |  |
| Date |  | 31 October 2022 |
|  |  |  |
| Team ID |  | PNT2022TMID49645 |
|  |  |  |
| Project Name |  | Classification of Arrhythmia using Deep Learning |
|  |  | with 2-D ECG Spectral Image Representation |
|  |  |  |

**Function 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 website using email |
|  |  | for verification |
|  |  |  |
| FR-2 | User Confirmation | Verification of the OTP on the website |
|  |  |  |
| FR-3 | User Data | Uploading of the ECG used for Arrhythmia |
|  |  | Diagnosis |
|  |  |  |
| FR-4 | User Diagnosis Results (Single Input) | Results of the Arrhythmia Prediction & |
|  |  | Classification displayed in the website |
|  |  |  |
| FR-5 | User Diagnosis Results (Multiple Input) | Results of the Arrhythmia |
|  |  | Prediction & Classification sent to |
|  |  | registered email |
|  |  |  |
| **Non-Function Requirements :** | |  |

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

|  |  |  |
| --- | --- | --- |
| FR No. | Non-Functional Requirement (Epic) | Sub Requirement (Story/Sub-Task) |
|  |  |  |
| NFR-1 | Usability | Efficiency and overall satisfaction of the |
|  |  | user when using Diagnosis service through |
|  |  | website |
|  |  |  |
| NFR-2 | Security | Authentication and Authorization of the |
|  |  | website |
|  |  |  |
| NFR-3 | Reliability | Probability of successful operations for a |
|  |  | specified time in an environment |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| NFR-4 | Availability | Service should be readily available for 100% |
|  |  | of the users |
|  |  |  |
| NFR-5 | Scalability | Capacity of the website to handle growth |
|  |  |  |