

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

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| Date | 20 October 2022 |
| Team ID | PNT2022TMID53645 |
| Project Name | Visualizing and Predicting Heart Diseases with an Interactive Dash Board |
| 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 | The users can register/Sign up through Gmail or through a form which gets user details(email, username, password etc ..) |
| FR-2 | User Confirmation | The registration is confirmed via mail. From the user end it is confirmed with OTP recieved through mail. |
| FR-3 | Loading User Data | The user will enter/give the details required to predict heart disease via the platform. |
| FR-4 | Visualizing the Data | The user will be able to visualize the heart disease trend through Dashboard created using IBM Cognos Analytics. |
| FR-5 | Generating Report | The user can access their report generated based on the details given. |
| FR - 6 | Recommandation | Set of recommandation to recover can be given, which should be taken only with the consent of a cardiologist. |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | The application will be completely user friendly and easy to use and move around. The user will be able to understand all the feature and how to enter the details, visalise and also to get the generated report. |
| NFR-2 | Security | The user details should be safe without being leaked to any third party, so that the user will feel comfortable. The technique known as database replication should be used so that all the important data should be kept safe. In case of any crash of the system, the application should be able to record the data. |
| NFR-3 | Reliability | The application has to work without any failure with enough accuracy. And it should give consistent results at every scenario. |
| NFR-4 | Performance | The performance of the system depends on the response time and accuracy of the system to predict the results. The performance of the system depends |

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| | | on the machine learning algorithm used and how efficiently it is being used. |
| NFR-5 | Availability | The application has to be available 24/7 for the user, so the servers has to be used in such a way that it is available anytim to the user. |
| NFR-6 | Scalability | <p>The application should be able to withstand anynumber of users accessing and using the site. The application has to be flexible to adapt the higher version of technology.</p> <p>The other possible factors that will useful to predict heart disease in the future should be included. And the new heart diseases also should be able to update in the site.</p> |