**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 04 October 2022 |
| Team ID | PNT2022TMID53565 |
| Project Name | Statistical Machine Learning Approaches to  Liver Disease Prediction |
| Maximum Marks | 4 Marks |

**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 | New user account can be created through web application. |
| FR-2 | User Confirmation | The system gives an approval message after the user account is activated. |
| FR-3 | User mediaction data | Data should be fed to the dashboard text fields in the application. |
| FR-4 | Database Management | User data will be saved in the database and will be used for future reference. |
| FR-5 | Reporting | Predicting liver disease using given data and generatingthe medical report for future use. |
| FR-6 |  |  |

**Non-functional Requirements:**

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

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | The whole system can be accessed through web application. Hence it is very easy to use. |
| NFR-2 | **Security** | Security requirements ensure that the software is protected from unauthorized access to the system and its stored in data. |
| NFR-3 | **Reliability** | Support vector machine (SVM), Random Forest algorithm and KNN algorithm have been employed for developing liver disease risk prediction model and obtained the accuracy. |
| NFR-4 | **Performance** | Application effectively compares user given parameters with the required dataset. Hence performance would be considerably good. |
| NFR-5 | **Availability** | It is gauged by period that system's functionality & services are available for use with all operations. |
| NFR-6 | **Scalability** | Application can be used in any kind of operating system either in small or large OS so the scalability is very high. |