

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

Date	03 October 2022
Team ID	PNT2022TMID21545
Project Name	Analytics for Hospitals Health-Care Data
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	Analysing and Visualizing Hospital health care data	<ul style="list-style-type: none">● Visualizing Analysis result on application dashboard.● Analyze the relationship between various attributes in the dataset and Length of stay.● Interactive dashboard that users can easily understand the insights.
FR-2	Prediction of LOS	<ul style="list-style-type: none">● Predict the Length of Stay using the user's hospital data like Severity of disease, hospital type, hospital location, hospital name, emergency or not , etc.● System should predict the LOS with any number of given attributes.
FR-3	Obtaining User Response for prediction	<ul style="list-style-type: none">● Get the user's response after the prediction.● This helps us to find how accurate our prediction is from the user's point of view.● Bad user experience can be noted by doing this● So that we can improve the prediction accuracy..

FR-4	Monitoring user response and satisfaction	<ul style="list-style-type: none"> ● Real Time monitoring of user response. ● Monitoring user satisfaction through various visualizations like barchart, pie chart etc.
FR-5	Monitoring System accuracy	<ul style="list-style-type: none"> ● The accuracy of the prediction should be monitored every time there is a change in dataset. ● If the accuracy becomes low the model should be redesigned for higher accuracy. ● This way the predictions will be up to date.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The goals of the users are easily accomplished quickly by interactive design and less error.
NFR-2	Security	The dataset is accessed only by the administrators and the user's input is encrypted and it is protected.
NFR-3	Reliability	It works without a failure at the prediction time because of less bugs in the code it is because of using good trained data.
NFR-4	Performance	It supports at most 1000 patients queries at a time and after prediction is done it will be fastly communicated to the users.
NFR-5	Availability	The application is 99% available 24/7.
NFR-6	Scalability	The application should support all browser types and it can handle maximum users.