

Project Design Phase-I
Proposed Solution

Date	24 September 2022
Team ID	PNT2022TMID27483
Project Name	Analytics for Hospitals' Health-Care Data
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The hospitals need a way to accurately predict the Length of stay for each patient at the time of admission and classify them into various categories so that the patients with high LOS have their treatment plan optimized on minimum LOS and also the hospital resources such as rooms and beds are efficiently utilized.
2.	Idea / Solution description	Our solution is to build an efficient and an intelligent system. In that we will explore large amounts of data and visualize them. We will be using python and other predictive analysis to predict the length of stay of patients in the hospital and categorize them into various categories.
3.	Novelty / Uniqueness	We took the effort to identify the most important variables that affect the length of stay in the hospital. We referred to the previous cases that are similar to the corresponding ones. We found a significant variation of LOS across based on various facilities and across disease conditions and specialties even within the same healthcare system
4.	Social Impact / Customer Satisfaction	By using this application in addition to improving patient safety and lowering costs, reducing LOS can release capacity in the system (including beds and staff time) and improve throughput, enabling the hospital to serve more patients.
5.	Business Model (Revenue Model)	By increasing the dataset, the accuracy of the result increases. This increases the trust of the customer and hence automatically increases the revenue.
6.	Scalability of the Solution	This application can be accessed online without paying. It can be accessed via any browser of your choice. The application can be expanded from analyzing the data in a particular district to state to the global level.