

Project Design Phase-I
Proposed Solution

Team ID	PNT2022TMID21113
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)	To accurately predict the Length of Stay (LOS) for each patient on case by case basis so that the Hospitals can use this information for optimal resource allocation and better functioning.
2.	Idea / Solution description	To predict the Length of Stay (LOS) by using Predictive analysis with the parameters like age, stage of disease, progression, etc.. and IBM Cognos is used for creating dashboard for monitoring and analytics.
3.	Novelty / Uniqueness	The Results are predicted with more accuracy by which overstay can be reduced and proper resource allocation and treatment can be provided.
4.	Social Impact / Customer Satisfaction	It helps to find the patients with high LOS risk. Once identified, patients with high LOS risk can have their treatment plan optimized to minimize LOS and lower the chance of staff/visitor infection. The prior knowledge of LOS can aid in logistics such as room and bed allocation planning. LOS based prediction minimizes the overflow of patients so hospital resource management and utilization will be maximized and it reduces expense for treatment.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none">• Application of this system can be done in both public and private hospitals and clinics• Length of stay prediction as Activity• Key Resource are medical records.• Resulting in Lower Bed consumption.• Optimized Treatment plan according to patient's Length of Stay.
6.	Scalability of the Solution	The scalability of this project is that the system that can accurately predict the Length of Stay of a Patient which can be scaled on both local and cloud environments.