Project Design Phase-1
Proposed solution

Date	1 November 2022
Team Id	PNT2022TMID02935
Project Name	Project - Analytics For Hospitals' Health-Care Data
Maximum Marks	2 Marks

Proposed Solution:

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	Predict the length of stay of patients.
2.	Idea / Solution Description	The length of the stay can be predicted using either Random forest or Decision Tree for more accuracy. Certain parameters like age, stage of the diseases, disease diagnosis, severity of illness, type of admission, facilities allocated, etc., are used for prediction. IBM Cognos will be used for data analytics. The model will be trained using colab.
3.	Novelty / Uniqueness	It predicts the length of stay (LOS) of the patients with more accuracy. As a result proper resources and therapy can be provided.
4.	Social Impact / Customer Satisfaction	Patients can get proper treatment and better medical care than before which helps them for their faster recovery. So the prediction minimizes the overflow of patients and helps in resource management and optimize their resource utilization. Hence this leads to faster recovery and lower the expenses for treatment. It improves the trust in

		hospital management. It avoids the major risk of spreading infection among the hospital staff. This leads to overall safety of hospital staff and patients.
5.	Business Model (Revenue Model)	● Resource consumption is optimized ● The model is trained with the real world hospital survey for better prediction ● This model can be used by all government hospitals, private hospitals, and even in small clinics ● Length of the stay will be predicted with more accuracy.
6.	Scalability of the Solution	● This model predicts the length of the stay for all kinds of patients. ● It predicts with more accuracy