## Project Design Phase-I Proposed Solution

| Team ID       | PNT2022TMID11641                          |
|---------------|---|
| 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 predict the length of stay of patients and accommodation.   |
| 2.    | Idea / Solution description              | The length of stay can be predicted using either Fuzzy logic or Tree bagger algorithms. Along with the algorithm certain parameters like age, stage of disease, progression, etc., are used for prediction. IBM Cognos is used for analytics purposes. |
| 3.    | Novelty / Uniqueness                     | It predicts the result with more accuracy using which overstays can be reduced. Proper resources and therapy can be provided.  |
| 4.    | Social Impact / Customer Satisfaction    | Patients can get better treatment and care than before. Length of stay prediction minimizes the overflow of patients therefore hospital resource management and utilization will be maximized. Reduces expense for treatment.                          |
| 5.    | Business Model (Revenue Model)           | <ul> <li>This system can be used in all government hospitals, private hospitals, and even small clinics.</li> <li>Activities – Length of stay prediction.</li> <li>Key Resource – Medical records.</li> <li>Bed consumption is low.</li> </ul>         |
| 6.    | Scalability of the Solution              | This model will predict the length of stay of all kinds of patients.   |