**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID23263 |
| Project Name | Project – 10738-1659200545  Analytics For Hospitals' Health-Care Data |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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| **S.No.** | **Parameter** | **Description** |
| 1. | Problem  Statement (Problem to be solved) | To predict the Length of Stay(LOS) of the patient to get information for optimal resource allocation and better functioning. |
| 2. | Idea / Solution description | The Length of Stay(LOS) of the patients depends on the major factors such as type of disease, age and severity . The data is pre-processed first according to the most important details from the dataset. The dataset is explored and visualized and then using the techniques of ensemble algorithms consisting of many decision trees prediction model is developed. |
| 3. | Novelty /  Uniqueness | The problem in real time is to find the availabilities. The uniqueness of our proposal is to convey the availabilities to the consumer with maximal accuracy. |
| 4. | Social  Impact /  Customer  Satisfaction | It helps to identify patients of high LOS risk (patients who will stay longer) at the time of admission. Once identified, patients with high LOS risk can have their treatment plan optimized to minimize LOS and lower the chance of staff/visitor infection. Also, prior knowledge of LOS can aid in logistics such as room and bed allocation planning. The problem is to manage the functioning of Hospitals in a professional and optimal manner. |
| 5. | Business  Model  (Revenue  Model) |  |
| 6. | Scalability of the Solution | The primary model of our solution is to target only less consumers. So it is sufficient to implement with local servers.  In future, it can be extended to the large scale on needs .At that time the usage servers is considerably high. So it can be extended further to the Cloud services. |