**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 19 September 2022 |
| Team ID | PNT2022TMIDxxxxxx13374-1659517516 |
| Project Name | Statistical Machine Learning Approaches To Liver Disease Prediction |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | The number of patients with liver disease has been steadily rising as a result of heavy alcohol usage, exposure to dangerous gases, and use of  contaminated food. Health Care Professionals need to obtain patient samples to identify the liver disease, which could be expensive both money and time. The key problem is doctor  cannot provide a diagnosis based on test variation results. |
|  | Idea / Solution description | The application will accurately and quickly identify which individuals have liver disease and which ones do not by using patient records that include blood test report results. |
|  | Novelty / Uniqueness | To predict the presence of Liver disease with high efficiency. Instead of using individual classifier algorithms, an ensemble model that combines KNN, DT, RF is used to increase accuracy. Model is deployed using Heroku cloud platform. |
|  | Social Impact / Customer Satisfaction | The proposed system will make socially healthy living by decreasing mortality rate. It is also helpful for the doctors to get patients treated at the earliest. |
|  | Business Model (Revenue Model) | * Health Care Sector (Hospitals). * Can generate revenue through direct customers. * Can collaborate with health care sector and generate revenue from their customers. |
|  | Scalability of the Solution | It is cost effective and user friendly. |