**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 25 September 2022 |
| Team ID | PNT2022TMID26382 |
| Project Name | Statistical Machine Learning Approaches To Liver Disease |
| 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 challenge is to predict the liver disease patient in faster and accurate way. |
|  | Idea / Solution description | We are building a machine learning model which uses statistical data to predict the disease for liver. |
|  | Novelty / Uniqueness | The major limitation of CNN is its inability to encode Orientational and relative spatial relationships, view angle. CNN do not encode the position and orientation of data. Lack of ability to be spatially invariant to the input data sample. This is resolved in this research work by combining the genetic algorithm with the CNN method. |
|  | Social Impact / Customer Satisfaction | Although knowledge of hepatic biology and pathology is advanced, the prevention and treatment of liver disease lag sadly. This discrepancy is attributable to lack of facilities and trained personnel. Morbidity and mortality of liver disease are increasing in frequency because alcoholism, adverse reactions from drug use and abuse, and viral hepatitis are more prevalent. As the nature of these factors suggests, the disadvantaged are particularly at risk. |
|  | Business Model (Revenue Model) | It solves the complex process of predicting the liver disease of patients with ease and also provides best results, which in turn helps the doctors to diagnose the liver disease more easily. |
|  | Scalability of the Solution | This model can be expanded to include more attributes for more accurate Detection. Can be extended to predict many classification of diseases in early stages. |