

Project Design Phase-I
Proposed Solution Template

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID04104 |
| 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 the proposed solution template.

| S.No. | Parameter | Description |
|-------|--|--|
| 1. | Problem Statement (Problem to be solved) | Liver diseases avert the normal function of the liver. Early detection of liver disease can be beneficial in the treatment of the disease to fast recover but it is complicated to identify the liver disease in early stages. Discovering the existence of liver disease at an early stage is a complex task for the doctors. |
| 2. | Idea / Solution description | The application will automatically differentiate healthy and diseased patients by the data entered by the User. Moreover the application generates a detailed medical report for future reference. |
| 3. | Novelty / Uniqueness | This application also includes features to find other diseases at an early stage. Privacy can be maintained by saving the patient details in a secure, encrypted database, which makes this model unique. |
| 4. | Social Impact / Customer Satisfaction | The application gives basic recommendations to the patients. The application should also include the features for the early detection of other diseases such as kidney disease prediction and diabetes prediction. |
| 5. | Business Model (Revenue Model) | This application is more useful for hospitals and patients to predict liver disease in less time. It uses different algorithms such as Decision Tree, Random Forest, KNN, SVM, Logistic Regression to improve the accuracy of the model. |
| 6. | Scalability of the Solution | The application gives information about common symptoms of liver disease. It prioritizes the available features using machine learning techniques. |