**Project Design Phase**

**Proposed Solution**

|  |  |
| --- | --- |
| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID60665 |
| Project Name | Revolutionizing Liver Care : Predicting Liver Cirrhosis using Advanced Machine Learning Techniques |
| Maximum Marks | 2 Marks |

**Proposed Solution :**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | Liver cirrhosis often goes undetected until late stages due to lack of early diagnosis tools, especially in rural areas. Traditional methods are invasive, costly, and not easily accessible. |
|  | Idea / Solution description | An AI-powered system that uses machine learning to predict liver cirrhosis from routine clinical data through a simple, non-invasive web-based tool for early diagnosis and better treatment outcomes. |
|  | Novelty / Uniqueness | Combines basic medical data with powerful ML models in a user-friendly web interface, offering fast, accurate, and low-cost diagnosis without needing advanced medical equipment. |
|  | Social Impact / Customer Satisfaction | Improves early detection, saves lives, reduces treatment costs, and builds trust among patients and doctors—especially beneficial in underserved regions. |
|  | Business Model (Revenue Model) | Offered as SaaS with options like subscriptions for clinics, one-time licensing, and government or NGO partnerships. Premium features and API integrations can generate additional revenue. |
|  | Scalability of the Solution | deployable across hospitals, clinics, and rural centers. Can be extended to other diseases and integrated with national health programs for broader impact. |