**Project Initialization and Planning Phase**

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| Date | 15 March 2024 |
| Team ID | LTVIP2024TMID24892 |
| Project Title | Liver Patient Identification – prediction of liver disease |
| Maximum Marks | 3 Marks |

**Project Proposal (Proposed Solution):**

The system we are proposing utilize various machine learning algorithms and techniques to identify liver patients. This system includes a machine learning-based approach for liver disease diagnosis using clinical and laboratory feature. A machine learning-based approach for liver disease diagnosis using clinical and laboratory features involves training machine learning algorithms on large datasets of clinical and laboratory features to identify patterns and relationships that can predict liver. By using this model we can predict which patient has liver disease accurately.

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| **Project Overview** | |
| Objective | Identifying wheather a person has a liver disease or not. |
| Scope | This project can identify the liver patient based on the clinical reports. |
| **Problem Statement** | |
| Description | Many patients with liver disease are not diagnosed until they exhibit symptoms of end-stage de compensation, which can be fatal. The current system relies heavily on manual data collection and analysis, which can be time-consuming and prone to errors. |
| Impact | It can be time-consuming and prone to errors. Many patients with liver disease do not have access to healthcare services, making it difficult for them to receive timely diagnosis and treatment. |
| **Proposed Solution** | |
| Approach | The system we are proposing utilize various machine learning algorithms and techniques to identify liver patients. This system includes a machine learning-based approach for liver disease diagnosis using clinical and laboratory feature. |
| Key Features | By using this model we can predict which patient has liver disease accurately.   * Low cost * Less time consuming * Timely diagnosis |

**Resource Requirements**

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| **Resource Type** | **Description** | **Specification/Allocation** |
| **Hardware** | | |
| Computing Resources | CPU/GPU specifications, number of cores | e.g., 2 x NVIDIA V100 GPUs |
| Memory | RAM specifications | e.g., 8 GB |
| Storage | Disk space for data, models, and logs | e.g., 1 TB SSD |
| **Software** | | |
| Frameworks | Python frameworks | e.g., Flask |
| Libraries | Additional libraries | e.g., scikit-learn, pandas, numpy |
| Development Environment | IDE, version control | e.g., Jupyter Notebook, Git |
| **Data** | | |
| Data | Source, size, format | e.g., Kaggle dataset , 584 reports, CSV |