

Project Initialization and Planning Phase

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| Date | 10 July 2024 |
| Team ID | 740021 |
| Project Title | Sepsis Survival Minimal Clinical Records |
| Maximum Marks | 3 Marks |

Project Proposal (Proposed Solution) Report

The proposal report aims to transform sepsis survival prediction using Machine learning, boosting efficiency and accuracy. It tackles system inefficiencies , promising better clinical outcomes ,reduced risks, and happier patients. Key features include a machine learning -based decision-making.

Project Overview

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| Objective | The primary objective is to revolutionize sepsis survival prediction by implementing advanced machine learning techniques, ensuring faster and more accurate assessments. |
| Scope | The project comprehensively assesses and enhances the sepsis survival prediction process, incorporating machine learning for a more robust and efficient system. |

Problem Statement

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| Description | Addressing inaccuracies and inefficiencies in the current sepsis survival prediction system adversely affects operational efficiency and patient outcomes. |
| Impact | Solving these issues will result in improved clinical efficiency, reduced risks, and an overall enhancement in the clinical decision-making process, contributing to patient satisfaction and healthcare success. |

Proposed Solution

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| Approach | Employing machine learning techniques to analyze and predict sepsis survival, creating a dynamic and adaptable clinical prediction system. |
| Key Features | Implementation of a machine learning-based sepsis survival prediction model. Real time decision-making for quicker clinical interventions. Continuous learning to adapt to evolving clinical landscapes. |

Resource Requirements

| Resource Type | Description | Specification/Allocation |
|---------------------|---|--------------------------|
| Hardware | | |
| Computing Resources | CPU/GPU specifications, number of cores | T4 GPU |
| Memory | RAM specifications | 8 GB |
| Storage | Disk space for data, models, and logs | 8 GB |
| Software | | |
| Frameworks | Python frameworks | Flask |

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| Libraries | Additional Libraries | Scikit-learn, pandas, NumPy, matplotlib, seaborn |
| Development Environment | IDE | Jupyter Notebook, PyCharm |
| Data | | |
| Data | Source, size, format | Kaggle dataset |