

**Project Initialization and Planning Phase**

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| Date | 09 July 2024 |
| Team ID | 739734 |
| Project Title | Evolving efficient classification patterns in Lymphography |
| Maximum Marks | 3 Marks |

**Project Proposal (Proposed Solution) template**

The proposal report aims to improve the classification of lymphography data using machine learning, boosting efficiency and accuracy. It addresses diagnostic inefficiencies, promising better operations, reduced risks, and improved patient outcomes. Key features include a machine learning-based classification model and real-time decision-making support for healthcare professionals.

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| **Project Overview** |  |
| Objective | The primary objective is to revolutionize the lymphography diagnosis process by implementing advanced machine learning techniques, ensuring faster and more accurate assessments. |
| Scope | The project comprehensively assesses and enhances the lymphography diagnosis process, incorporating machine learning for a more robust and efficient system |
| **Problem Statement** |  |
| Description | Addressing inaccuracies and inefficiencies in the current lymphography diagnosis system, which adversely affect diagnostic accuracy and patient satisfaction. |
| Impact | Solving these issues will result in improved diagnostic accuracy, reduced risks of misdiagnosis, and an overall enhancement in the diagnostic process, contributing to patient satisfaction and healthcare success. |
| **Proposed Solution** |  |
| Approach | Employing machine learning techniques to analyze and classify lymphography data, creating a dynamic and adaptable diagnostic support system. |



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| Key Features | 1. Implementation of a machine learning-based lymphography classification model. 2. Real-time decision-making support for quicker and more accurate diagnoses. 3. Continuous learning to adapt to evolving medical data and diagnostic standards. |

**Resource Requirements**

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| **Resource Type** | **Description** | **Specification/Allocation** |
| **Hardware** |  |  |
| Computing Resources | CPU/GPU specifications | T4GPUs |
| Memory | RAM specifications | 8 GB |
| Storage | Disk space for data, models, and logs | 1 TB SSD |
| **Software** |  |  |
| Frameworks | Python frameworks | Flask |
| Libraries | Additional libraries | scikit-learn, pandas, numpy, matplotlib, seaborn |
| Development Environment | IDE, version control | Jupyter Notebook, Vs code |
| **Data** |  |  |
| Data | Source, size, format | UCI Lymphography Dataset, CSV |