**Project Initialization and Planning Phase**

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| Date | 5 July 2024 |
| Team ID | 739902 |
| Project Title | FetalAI: Using Machine Learning To Predict And Monitor Fetal Health |
| Maximum Marks | 3 Marks |

**Project Proposal (Proposed Solution) template**

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

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| **Project Overview** | |
| Objective | Develop an AI-powered platform to enhance prenatal care by accurately detecting fetal anomalies and monitoring fetal development, providing timely insights to healthcare professionals and expectant parents. |
| Scope | Build an ML model for precise detection and monitoring of fetal anomalies to enhance prenatal care. |
| **Problem Statement** | |
| Description | Develop an AI platform for precise detection and monitoring of fetal anomalies. |
| Impact | Improve prenatal care and outcomes through early diagnosis and continuous fetal health monitoring. |
| **Proposed Solution** | |
| Approach | Utilize advanced machine learning algorithms and medical imaging integration and predict fetal health. |
| Key Features | Real-time monitoring,  Accurate results,  Detailed reporting,  User-friendly interface. |

**Resource Requirements**

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| **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 | 1 TB SSD |
| **Software** | | |
| Frameworks | Python frameworks | Flask |
| Libraries | Additional libraries | scikit-learn, pandas, numpy, matplotlib… |
| Development Environment | IDE | Jupyter Notebook |
| **Data** | | |
| Data | Source, size, format | Kaggle Dataset, 228.72 kB, csv |