**Project Proposal**

**Overview of the Project**

This project aims to develop a **Medical Information Extraction System** using NLP techniques. The system will process and extract relevant medical data from unstructured documents, enhancing efficiency in medical record management and clinical decision-making.

**Objectives**

* Utilize **Natural Language Processing (NLP)** to extract key medical information from documents.
* Improve **data accessibility** and **retrieval speed** for healthcare professionals.
* Ensure **accuracy and reliability** of extracted information.
* Develop a user-friendly interface for ease of interaction with extracted data.

**Scope**

**Included:**

* Data preprocessing and cleaning
* Named Entity Recognition (NER) for medical terms
* Classification of medical documents
* Summarization of extracted information
* Integration with structured medical databases

**Excluded:**

* Real-time processing of medical records
* Legal compliance verification for medical document handling
* Integration with hospital management systems

**Expected Outcome**

* A functional prototype capable of **accurately extracting and summarizing** medical information from unstructured text.
* A **scalable** system that can be integrated into healthcare applications.
* Improved **efficiency and accuracy** in medical documentation and retrieval processes.

This document serves as a high-level overview of the project. Further details will be outlined in subsequent project planning documents.