Project Management Plan

Project Overview

The Healthcare Predictive Analytics project aims to enhance healthcare outcomes through data-driven insights. Using machine learning, the model will assist professionals in patient risk prediction, trend analysis, and informed decision-making to improve care and resource management.

Project Milestones

DATA COLLECTION, EXPLORATION AND PREPROCESSING DATA ANALYSIS AND VISUALIZATION PREDICTIVE MODEL DEVELOPMENT AND OPTIMIZATION

MLOPS, DEPLOYMENT, AND MONITORING FINAL DOCUMENTATION AND PRESENTATION

Collect relevant healthcare data, explore the dataset for trends, and preprocess it for further modeling Tasks:

- Data Collection
- Data Exploration
- DataPreprocessing:

Perform in-depth data analysis and generate insights through visualizations to aid in healthcare decisionmaking.

Tasks:

- Data Cleaning
- Data Analysis:
- Data Visualization

Develop and optimize machine learning models to predict healthcare outcomes, such as patient risk prediction.

Tasks:

- Model Selection
- Model Training
- Model Evaluation

Implement MLOps for tracking model performance and deploy the predictive model for real-world healthcare applications Tasks:

- Model Deployment
- Model Monitoring
- Performance Reporting

Finalize the documentation and present the results to healthcare stakeholders, demonstrating the model's value.

Tasks:

- Final Report
- Final Presentation

Our Timeline



Deliverables

Milestone

Deliverables

Data Collection, Exploration & Preprocessing

- EDA Report
- Interactive Visualizations
- Cleaned Dataset

Data Analysis, Visualization & Feature Engineering

- Data Analysis Report
- Visualizations of Health Trends
- Feature Engineering Summary

Model Development & Optimization

- Model Evaluation Report
- Model Code
- Final Model

MLOps, Deployment & Monitoring

- Deployed Model
- MLOps Report
- Monitoring Setup