Team member's details :

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Problem description: Data Science:: Healthcare - Persistency of a drug:: Group Project

Business understanding :

Context and Importance

- Persistency, the continuation of a prescribed medication by patients as recommended by their healthcare providers, is a critical factor in the effectiveness of drug therapies. Pharmaceutical companies, like ABC Pharma, face significant challenges in ensuring that patients adhere to their prescribed treatments. High persistency rates are associated with better health outcomes and lower overall healthcare costs, making it imperative for pharmaceutical companies to understand the factors influencing persistency.

Understanding and improving persistency can lead to:

Enhanced Patient Outcomes: Consistent medication usage leads to better management of chronic conditions and overall patient health.
Cost Efficiency: Reducing hospital readmissions and additional treatments required due to non-adherence can lead to substantial cost savings.
Market Insight: Gaining insights into patient behavior can help tailor marketing strategies and educational campaigns to improve adherence.
Competitive Advantage: Developing a deeper understanding of persistency can position ABC Pharma as a leader in patient care and engagement.

Project life cycle along with deadline

May 20 - May 22: Problem Understanding and Planning
May 23 - May 26: Data Understanding and Collection
May 27 - June 2: Data Cleaning and Feature Engineering
June 3 - June 6: Model Development
June 7 - June 8: Model Selection
June 9 - June 10: Model Evaluation
June 11 - June 12: Reporting
June 13 - June 15: Deployment and Finalization

Data Intake report

This report outlines the data intake process for the project aimed at understanding and predicting drug persistency. The goal is to collect, describe, and assess the quality of the dataset provided by ABC Pharma to ensure it is suitable for further analysis and model development.

The dataset provided by ABC Pharma consists of patient demographic, clinical, and treatment-related information. This data is critical for building a classification model to predict the persistency of drug usage.