

Group Name: Medi-Analytics

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Problem Description

Pharmaceutical companies are encountering challenges in understanding the persistency of a drug based on physicians' prescriptions and determining the number of patients who continue with the prescribed treatment. This involves tracking various prescription details, such as the duration the drug should be taken, the interval between doses, and specific instructions like whether the drug should be taken before or after meals.

Business Understanding

To address this issue, ABC Pharma has sought the expertise of an analytical company to automate the identification process and develop a classification model using a given healthcare dataset. This initiative aims to enhance the understanding of drug persistency and improve patient adherence to prescribed treatments.

The following schedule outlines the project lifecycle, tasks, and deadlines. Deadlines are divided into two parts: an initial draft due every Monday and the final version due on Thursdays. GitHub will be used for work submissions.

Phases	Tasks	Deadlines
Phase 1: <u>Understanding the problem</u>	<ul style="list-style-type: none">• Data understanding• Business understanding	<u>Week 7</u> 1st draft- 15/07/2024 Official- 18/07/2024
Phase 2: <u>Data preparation</u>	<ul style="list-style-type: none">• Data cleaning• Type of data• Data problems• Approaches used to overcome the problems in the data• Techniques used	<u>Weeks 8</u> 1st draft- 22/07/2024 Official- 25/07/2024 <u>Week9</u> 1st draft- 29/07/2024 Official- 01/08/2024
Phase 3: <u>Model planning</u>	<ul style="list-style-type: none">• Exploratory Data Analysis (EDA)• EDA performed on data• EDA recommendation• EDA presentation for business users	<u>Week10</u> 1st draft- 05/08/2024 Official- 08/08/2024
Phase 4: <u>Model building</u>	<ul style="list-style-type: none">• Linear model• Ensemble• Boosting	<u>Week11</u> 1st draft- 12/08/2024 Official- 15/08/2024
Phase 5: <u>Communicate results</u>	<ul style="list-style-type: none">• Findings are shared with the stakeholders• PowerPoint presentation	<u>Week12</u> 1st draft- 19/08/2024 Official- 22/08/2024