



MEDICINE RECOMMENDATION SYSTEM

Group 11



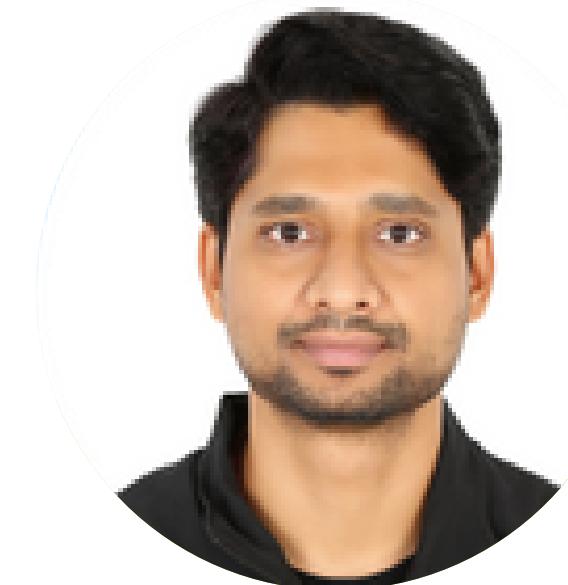


MEET OUR TEAM

Group 11



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INTRODUCTION

The Pharmaceutical market is crowded by a multitude of medicines varying in compositions, dosages, and forms for treating ailments.

However, this diversity is often confusing to the patients and sometimes even healthcare professionals, making it difficult to find alternatives to specific medications.

Compositions and Dosages being crucial for finding alternatives, there is a clear need for a reliable and efficient solution.





PROBLEM STATEMENT

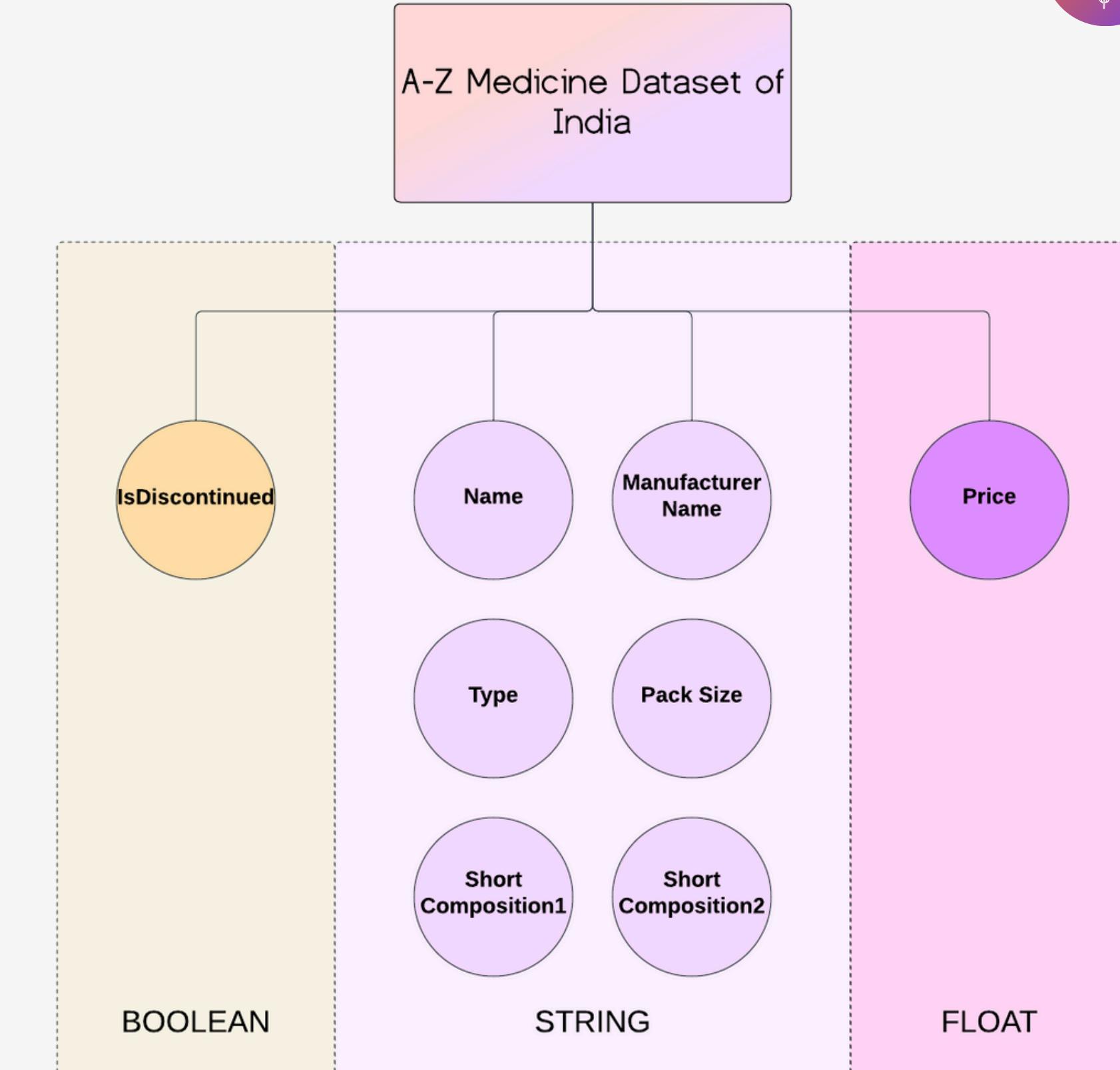
This Project Aims to achieve the following goals:

- Dashboard the distribution of various medicines in the Indian Pharma Market.
- Empower patients and assist Healthcare Professionals by finding alternative medications, based on form and composition, with relative ease.
- Simplify and streamline the process with the use of a simple and effective UI.



DATASET DESCRIPTION

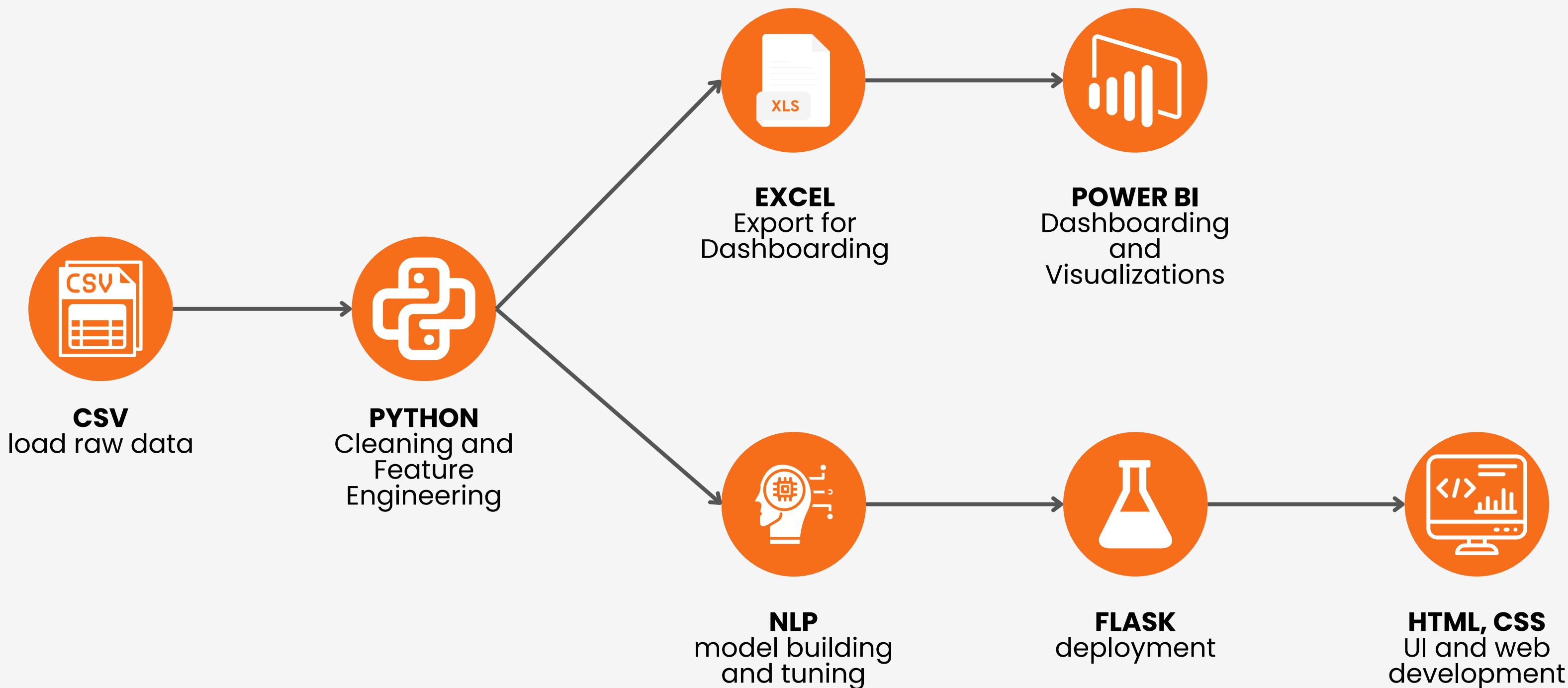
- **Source:** Kaggle
- Data recorded up to November 2022
- Data Structure:
 - 8 Features
 - 253,973 Records
 - 249,398 Unique name medications
 - 7,648 Unique Manufacturers



<https://www.kaggle.com/datasets/shudhanshusingh/az-medicine-dataset-of-india>



METHODOLOGY





EXPLORATORY DATA ANALYSIS





MEDICINE RECOMMENDATION MODEL



FEATURE EXTRACTION

- Extract relevant features.
- Focus on key attribute: the drug composition.

WEIGHT ASSIGNMENT

- Assign appropriate weights to each feature as per the importance.
- For instance, drug composition carries more weight than other attributes.

GENERATE RECOMMENDATION

- Calculate similarity scores between the target medicine and others using Cosine Similarity function.
- Use assigned weights to recommend medicines with the highest similarity scores.



Medicine Recommendation System

Search

Alternatives of Azithral 500 Tablet

Azithromycin (500mg)

by

Alembic Pharmaceuticals Ltd

Name	Composition	Manufacturer Name	Similarity Score
Azithral Pulse Tablet	Azithromycin (500mg)	Alembic Pharmaceuticals Ltd	4.200000
Azithral Pulse Tablet	Azithromycin (500mg)	Alembic Pharmaceuticals Ltd	4.200000
Azithral 5D Tablet	Azithromycin (500mg)	Alembic Pharmaceuticals Ltd	4.200000
Azithral Pulse 500mg Tablet	Azithromycin (500mg)	Alembic Pharmaceuticals Ltd	4.200000
Gerimac 500mg Tablet	Azithromycin (500mg)	Alembic Pharmaceuticals Ltd	4.200000
Azidor 500mg Tablet	Azithromycin (500mg)	Ardor Drugs Pvt Ltd	4.132470
Glazit 500mg Tablet	Azithromycin (500mg)	Glasier Wellness Inc	4.131917



RECOMMENDATIONS & FUTURE WORK

**EXPAND THE
MARKET**

**OPTIMIZE RESPONSE
TIME**

**CUSTOMIZE FEATURE
WEIGHTAGE**

**ENHANCE USER
INTERFACE**



Thank You