



# SMART MEDICINE RECOMMENDER SYSTEM





# GROUP 1

Mohammad Hasan-PES2UG25CS309

Mayank Singhanian-PES2UG25CS301

Mohamed Sulaiman Rahman-PES2UG25CS308

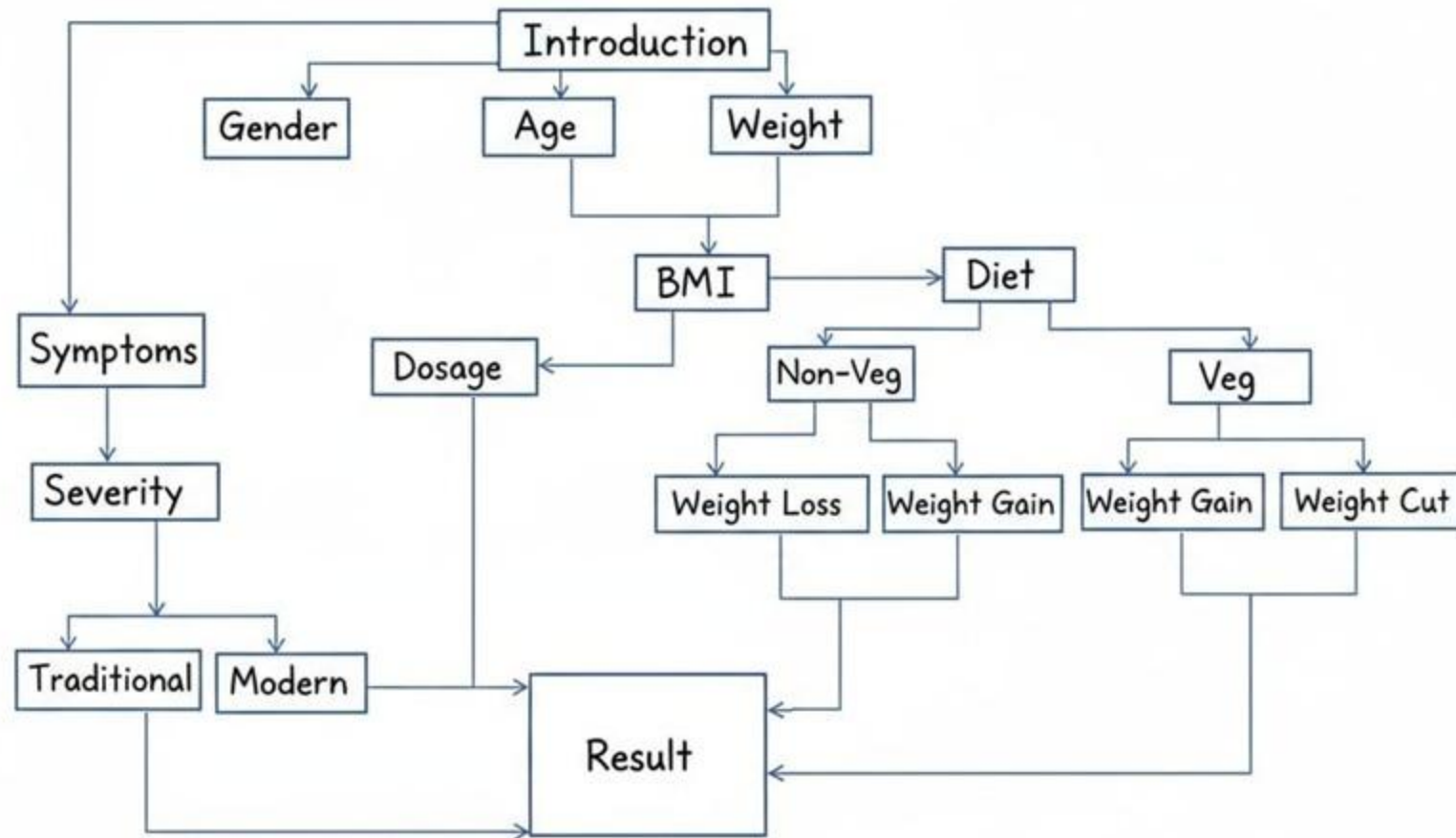
Harshwardhan-PES2UG24CS189





# PROBLEM STATEMENT

- Managing patient symptoms, identifying relevant medicines from a database, and suggesting appropriate dosage strength is a task that typically requires medical expertise and manual lookup. When dealing with multiple symptoms, determining which medicine matches best, what symptoms remain uncovered, or how severity and body metrics (such as BMI) influence recommended strength becomes time-consuming.



Batch-1

Mohammad Hasan-PES2UG25CS309

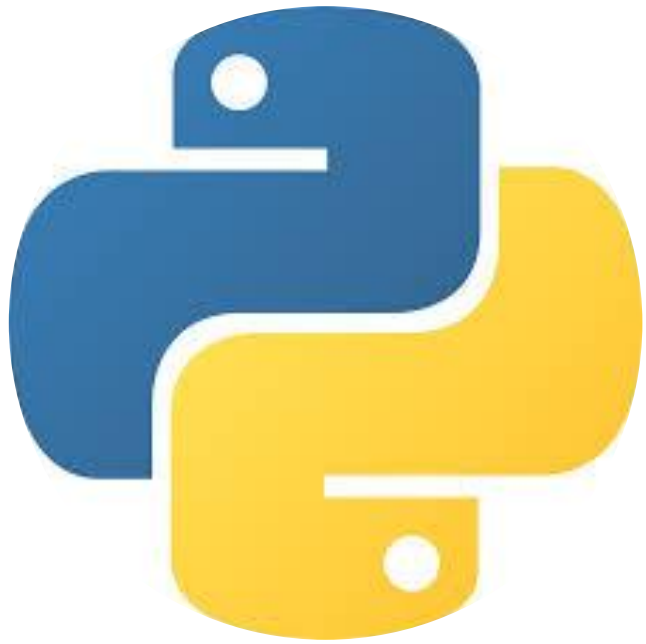
Mohamed Sulaiman Rahman-PES2UG25CS308

Mayank Singhania-PES2UG25CS301

Harshwardhan-PES2UG24CS189

# GENERAL LOGIC

- INPUT SYMPTOMS, AGE, WEIGHT, SEVERITY
- MATCHES SYMPTOMS TO MEDICINES FROM DATABASE
- COMPUTES BMI AND ASSIGNS STRENGTH FOR MEDICINES
- DIET PLAN GENERATION DEPENDING ON USER GOALS
- SAVES PRESCRIPTION AND DIET PLAN AS TEXT FILE



## LIBRARIES/MODULES USED

---

- TKINTER - GUI
- RE - TOKENIZING/TEXT CLEANING
- PATHLIB , OS - FILE HANDLING
- PANDAS - EXCEL DATA HANDLING
- TIME – CREATION/LOAD TIMES
- MATH,NUMPY- MATHEMATICAL OPERATIONS AND MATCHING

# ROLES

- **Database and text processing**  
Importing libraries, tokenization, prescription matching logic, dataset/file handling
- **Medical Logic Layer**  
BMI calculations, severity rules, strength assignment and medicine logic
- **Prescription GUI and Logic**  
Program Launcher, main prescription generation logic, saving system, program launching
- **GUI (Interface)**  
Tkinter GUI setup and widgets, GUI Initialization

Milestone	Quarter
Mohamed Sulaiman Rahman	Database and text processing, integration of code
Mayank Singhanian	Medical Logic Layer
Mohamed Hasan	Prescription GUI and Logic
Harshwardhan	GUI(Interface)



# GUI OVERVIEW

- Input Fields (symptoms, age , weight height)
- Slider widget for severity
- Buttons for different actions
- Panels for medicine assignments
- Metrics Panel for BMI
- Window for diet planner





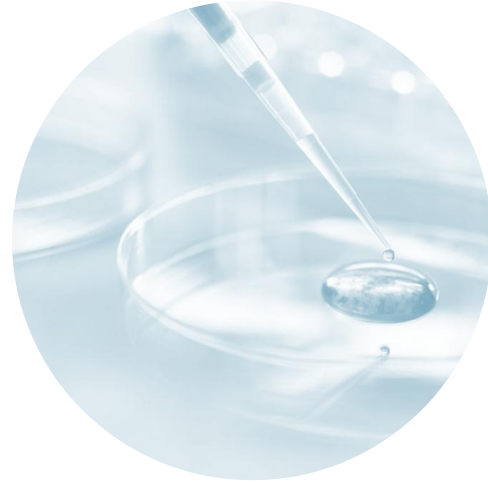
# SYMPTOM MATCHING LOGIC

- Normalize symptoms
- Convert to tokens
- Compare against database tokens
- Panels for medicine assignments
- Compute coverage score
- Choose best match



# SAVING & OUTPUT

- Prescription compiled into text file
- Saved to Desktop automatically
- Includes all data
- Diet plan optionally included



THANK YOU

