

ENGINEERING BETTER MEDICINES BY PREPARING BETTER PATIENTS

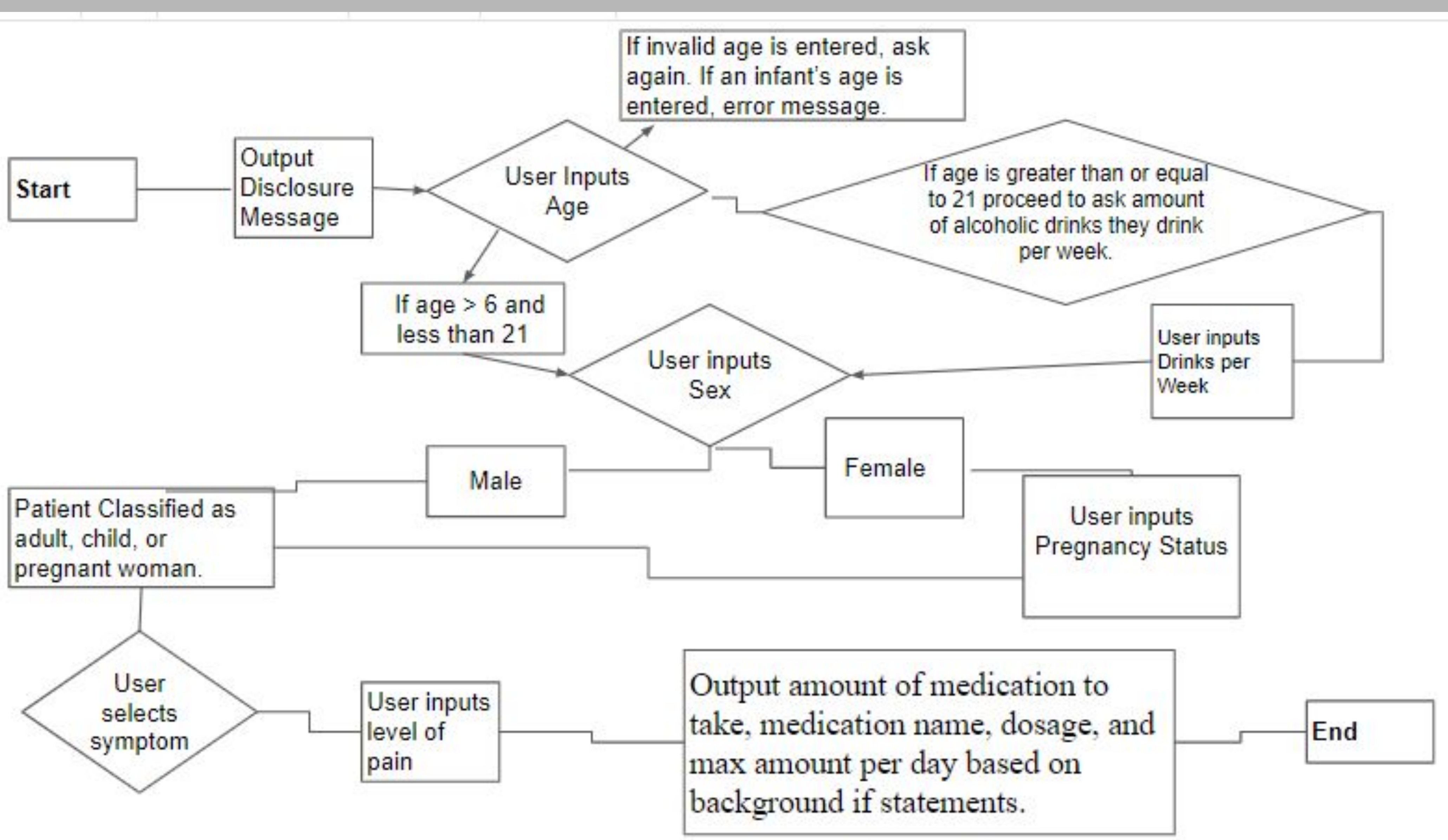
Problem Statement and Introduction

To help users make the best decisions in deciding which medications will provide patients with the best effects based on the individual patient's inputs. The drugs suggested serve as a guide to let the patient be more informed and better prepared to speak with a doctor about the concerns that they have.

Inputs & Outputs

- The inputs will include:
 - Age, if over 21, user inputs amount they drink
 - Sex, if female, ask for pregnancy status
 - Symptom being experienced
 - Level of pain being experienced
- The outputs will include :
 - Opening warning about the proper use of the program
 - Final result of amount of medication to take, medication name, dosage, and max amount per day.

Algorithm



Test Case

Warning: This is not to be used in place of a doctor, this program is solely meant to guide, not to diagnose.

User inputs

Age - 25

Drinks - 9

Pain level - 6

Sex - Female

What is your sex?

Male

Female

Pregnant - No

Are you pregnant?

Yes

No

Symptom- Headache

MENU

Please select from menu which symptom you are experiencing:

Headache

Arthritis

Emotional Distress

Neck or back pain

Pain

Result:

Patient is recommended to take 2 pill(s) of Ibuprofen every 3 hours and the total amount should not exceed 3200 [mg] a day.

Conclusion and Limitations

If used as part of the research people commonly do when they are about to visit a doctor for a given condition, this program will be able to give the user a quick result that they can discuss with their doctor. Of course, this program is limited by the amount of medication and the information about the medication that is initially loaded in. However, this limitation can of course easily be minimized by adding more medication data.

Source

https://www.rxlist.com/pain_medications/drugs-condition.htm