

PHARMA FEEDBACK RECOMMENDER

Guide: Shidha M V

Scrum Master: Shahana K U

Student: Mohammed Shekeeb K

S3 MCA-B



PHARMA FEEDBACK RECOMMENDER USING MACHINE LEARNING

The Pharma Feedback Recommender using reviews is a data-driven system designed to assist healthcare professionals, patients, and consumers in making informed decisions about pharmaceutical products. The project aims to analyze user reviews, product descriptions, and ratings of various pharmaceutical products to provide personalized recommendations.

The Pharma Feedback Recommender using reviews seeks to provide valuable and personalized recommendations for pharmaceutical products, ultimately enhancing the decision-making process for healthcare professionals, patients, and consumers. It aims to make it easier for users to find the most suitable medications and healthcare products based on real user feedback and reviews, contributing to informed healthcare choices.

DATASETS



| 1 | | urlDrugNa rating | g effectiver | sideEffect | condition | benefitsR | sideEffect | commentsReview | | | | | | | | L |
|----|------|------------------|---------------|------------|-------------|-------------|--------------|-----------------------------|---------------------|---------------|-------------------|-------------------|--------------------|---------------|------------------|---------|
| 2 | 2202 | enalapril | 4 Highly Effe | Mild Side | managem | slowed | cough, hy | monitor blood pressure , | , weight and asse | s for resolut | tion of fluid | | | | | |
| 3 | 3117 | ortho-tri-c | 1 Highly Eff | Severe Sig | birth prev | Although | Heavy Cyc | Hate This Birth Control, | I Would Not Sug | gest This To | Anyone. | | | | | |
| 4 | 1146 | ponstel | 10 Highly Eff | No Side Ef | menstrua | I was used | Heavier bl | took 2 pills at the onset | of my menstrual | cramps and | then every 8-1 | L2 hours took 1 | pill as needed | for about 3-4 | days until cra | mps w |
| 5 | 3947 | prilosec | 3 Marginally | Mild Side | acid reflu | The acid r | Constipati | was given Prilosec pres | cription at a dose | of 45mg pe | r day. Medicati | ion was taken o | nce, every mo | rning before | eating. Each tr | eatme |
| 6 | 1951 | lyrica | 2 Marginally | Severe Sid | fibromyal | I think tha | I felt extre | See above | | | | | | | | |
| 7 | 2372 | propecia | 1 Ineffectiv | Severe Sig | hair loss | after takir | Low sex d | one pill once daily | | | | | | | | |
| 8 | 1043 | vyvanse | 9 Highly Eff | Mild Side | add | My mood | a few exp | had began taking 20mg | of Vyvanse for th | ree months | and was surpri | ised to find tha | t such a small c | lose affected | my mood so e | ffectiv |
| 9 | 2715 | elavil | 10 Considera | No Side Ef | depressio | Although | None. | One a day, taken about a | n hour before be | dtime. | | | | | | |
| 10 | 1591 | xanax | 10 Highly Eff | No Side Ef | panic disc | This simpl | I really do | first started taking this a | at 3 times per day | y with .25 mg | g pills. I was ad | vised not to tal | ke as needed w | ith my panic | attacks as that | would |
| 11 | 1686 | claritin | 1 Ineffectiv | Extremely | allergies | none - did | I had some | took one 10 mg pill night | tly. | | | | | | | |
| 12 | 458 | flagyl | 7 Considera | Moderate | bacterial v | I experien | I did get a | took the antibiotic as pr | rescribed every d | ay, twice a c | day, one pill ea | ch time. My Ba | cterial Vaginos | is cleared up | after treatme | nt. Hov |
| 13 | 3479 | dextroam | 8 Highly Eff | Moderate | add | Smoother | Dexerine | Switched from Adderall t | to Dexedrine to o | ompare the | effects. Dexec | drine is simply (| dextroampheta | amine while | Adderall is a m | ixture |
| 14 | 959 | sarafem | 8 Considera | Mild Side | depressio | I found th | My sides e | This was prescribes to m | e for treatment f | or depressio | n, seasonable | disorder and h | ormonal irritab | ility. Thave | gone off this n | nedica |
| 15 | 928 | latisse | 9 Considera | Mild Side | sparse eye | For the | My upper | For the first 6-8 weeks I u | used one drop ev | ery night ap | plied to upper | lash base with | a small disposa | able brush. 🛭 | fter my lashes | had gi |
| 16 | 2643 | aldara | 4 Considera | Severe Sid | skin cance | Aldara did | । felt an oा | used 1/4 of a packet (5% | cream) on just n | ny nose ever | ry other night a | nd on alternat | ing nights I put | on an entire | packet on my | entire |
| 17 | 3692 | effexor-xr | 8 Highly Eff | No Side Ef | anxiety | reduction | no side ef | took medication for 5 to | 6 years. Very har | rd to get off | this drug. I like | ed the way my | anxiety was co | ntrolled, but | it also inhibits | all em |
| 18 | 338 | neurontin | 6 Moderate | No Side Ef | nerve disc | I'm | I have no | take 600mg of Gabapen | tin three times d | ay. It seems | to be effective | e but I feel I ne | ed a hire dosag | e as the long | er I take it the | more |
| 19 | 3201 | omnicef | 1 Marginally | Severe Sig | sore throa | don't knov | My one ye | Thanks | | | | | | | | |
| 20 | 2566 | klonopin | 8 Considera | Mild Side | generalize | Very good | Fatigue ca | Used for general anxiety | and as an adjunc | t for depres | sion and chron | ic pain. Very g | ood at alleviati | ng any anxie | ty and jittery f | eelings |
| 21 | 723 | dovonex | 6 Moderate | No Side Ef | psoriasis | Controlled | a "halo" a | found this time-consum | ning to apply 1-2 t | times daily. | Also, due to th | ne "halo" effect | t, it was a little | precarious to | apply as well | |
| 22 | 305 | protopic | 8 Highly Effe | Moderate | ezcema | cure the e | skin | to apply once a day afete | er cleaning the sk | in, and avoid | d direct sunligh | nt | | | | • |

EXISTING SYSTEM

An existing pharmaceutical feedback recommender system is a software application or platform designed to help healthcare professionals, patients, and consumers make informed decisions about medications and treatments. It leverages data analysis, medical expertise, and user input to provide personalized medication recommendations.

PROPOSED SYSTEM

The proposed pharmaceutical feedback recommender system is an innovative software solution aimed at helping healthcare professionals, patients, and consumers make informed decisions about pharmaceutical products. It utilizes advanced data analysis, natural language processing, and machine learning techniques to offer personalized recommendations based on user reviews and feedback.

ALGORITHM

Multiple machine learning techniques were used to construct the pharmaceutical feedback recommender system which includes Logistic Regression, collaborative filtering algorithms such as matrix factorization, and classifiers such as LGBM, Decision Tree, and Random Forest.

Collaborative filtering algorithm:-

it is a family of algorithms that find similar users or items and calculate ratings based on ratings of similar users.

Front-end used:-

- HTML
- CSS
- JAVASCRIPT

Back-end used:-

- -Python
- -SQL

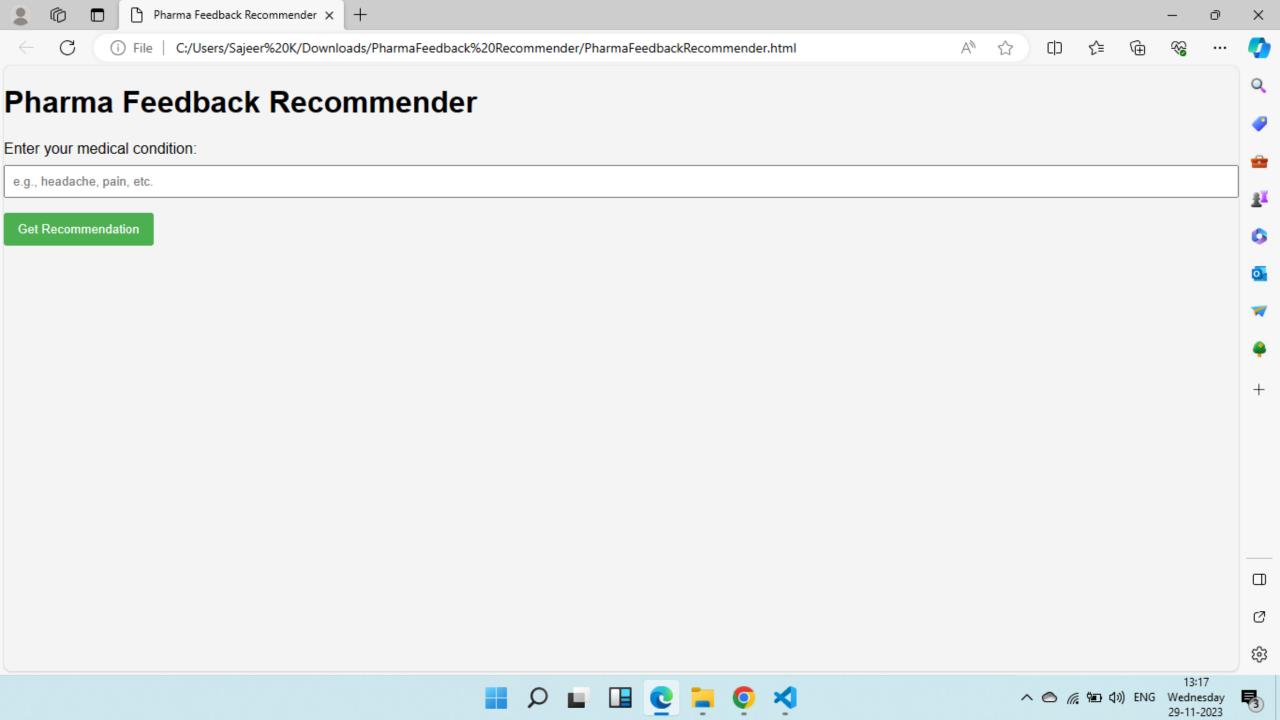
System requirements:-

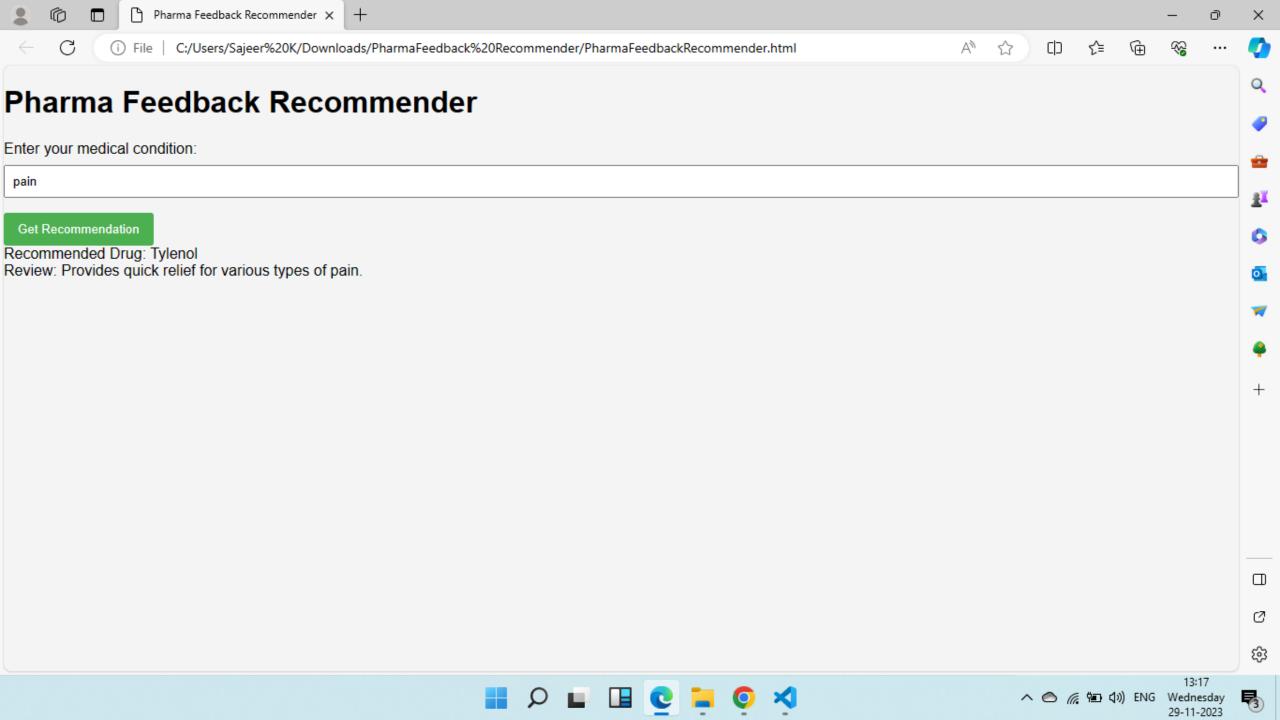
- OS: Windows

- RAM: 3GB

EXPECTED RESULT AND ANALYIS

The data consists of six components: the name of the drug used, the patient's rating, the patient's condition, a valuable number that indicates the number of people who experienced the benefit of the rating, the date the review was written, and a 10-star patient rating that indicates how the patient is doing overall satisfactory. According to the user's star rating, each review in this work has been categorized as positive or negative. Positive reviews are reviews with five or more stars, while negative reviews vary from one to five stars.







THANK YOU