

PROJECT IDEA PROPOSAL

The idea that I have decided to take forward for this term project is to come up with a recommender system for pharmaceutical drugs and products. This product or web app is going to be named “**PharmEazy**”. For every individual, it is extremely important to look after their health, because, health is wealth! Back in India, the availability of internet and the corresponding facilities has revolutionized the way of living, and they have become extremely affordable for people of all financial statuses. Smartphones are very much affordable in India, and there’s good 4G network coverage, but the downside is that the availability of 4G internet connectivity is more than the availability of medical assistance in remote areas of the country.

Not just this, but even people living in well developed areas prefer to not visit a doctor in case of a medical problem like a fever, the common cold, or even a headache, instead they choose to approach the pharmacy directly and opt for over-the-counter medication. How would one know if the medicine that they are opting for is the right medicine? How would they know if the medicine that they’re going for has the right composition of materials and chemicals to help them relieve themselves from the symptoms that they are undergoing? What if your doctor is unavailable due to personal reasons and it is an emergency? The “PharmEazy” recommender system will assist every individual by helping them search for the appropriate medicine that they should be consuming.

The data set for this recommender system is downloaded from the Kaggle website. The dataset was posted by Jessica Li. “<https://www.kaggle.com/jessicali9530/kuc-hackathon-winter-2018>”. The data has been divided into testing and training data, which will be used to train the recommender system. The project will be divided into several milestones across the semester. This includes text search, classification and recommendation features.

An individual will be able to look for a specific medicine that he or she requires, and if necessary, look for alternatives, in case the medicine has not helped them in the past. For someone who does not know what medicine he or she is supposed to use, the app will be able to recommend all the possible medications the individual can consume or use to cure them of their symptoms. The dataset contains reviews for each product, so the product with good reviews will be recommended to the user first, giving them the assurance that the medicine will be of help to them.

This product is aimed to make sure that people are selecting the right medicine to help them cure themselves and make sure they don’t experience any sort of side effects. This web app is for the people of the world, for the people of India, and for the people who do not have immediate access to medical help due to unforeseen circumstances. There are similar apps available like **WebMD**, **Medscape** and **Epocrates**, but with the help of Machine Learning and data mining and other supporting resources, this app will be developed.