

Medicine Recommendation System – SBERT Based

Description:

This model recommends relevant medicines based on the user's description of symptoms or health condition. It uses semantic similarity to match user input to the most appropriate medical condition, and then suggests top-rated medicines for that condition.

How it Works:

Data Used: The model uses drugsComTest_raw.csv containing drug reviews, conditions, ratings, and useful votes.

Model Used: SentenceTransformer with the all-MiniLM-L6-v2 model from HuggingFace, a lightweight version of SBERT (Sentence-BERT).

Methodology:

1. **Encode Conditions:** All unique medical conditions in the dataset are embedded using SBERT.
2. **User Input Embedding:** The user's symptom description is also embedded.
3. **Cosine Similarity:** The model computes similarity between the user input and all known conditions to find the closest match.
4. **Medicine Filtering:** Once a condition is matched, the top 10 highest-rated and most useful medicines for that condition are recommended, avoiding duplicates.

Output:

Matched medical condition

Top 10 recommended medicines (ranked by rating and usefulness)