PYEXPO25

Genius innovation leaves behind a legacy...

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PY-EXPO
KGiSL Institute of Technology

Team ID : T054

Team Name : HashTech

PS Number : PY065

PS Title : Smart Health Assistant Chatbot

Domain : NLP

Category : Software

Problem Statement:

TO DESIGN A CHATBOT FOR HEALTHCARE TO ASSIST PATIENTS UNDERSTANDING THEIR SYMPTOMS .

❖ **Delayed Medical Assistance** :
  Patients struggle to understand symptoms and get timely healthcare advice.

❖ **Overburdened Medical Services** :
  Hospitals and call center receive high volumes of inquiries, causing delays in response.

❖ **Target audience:**
  Patients seeking quick health advice and medication remainders .

➢ **Goal :**
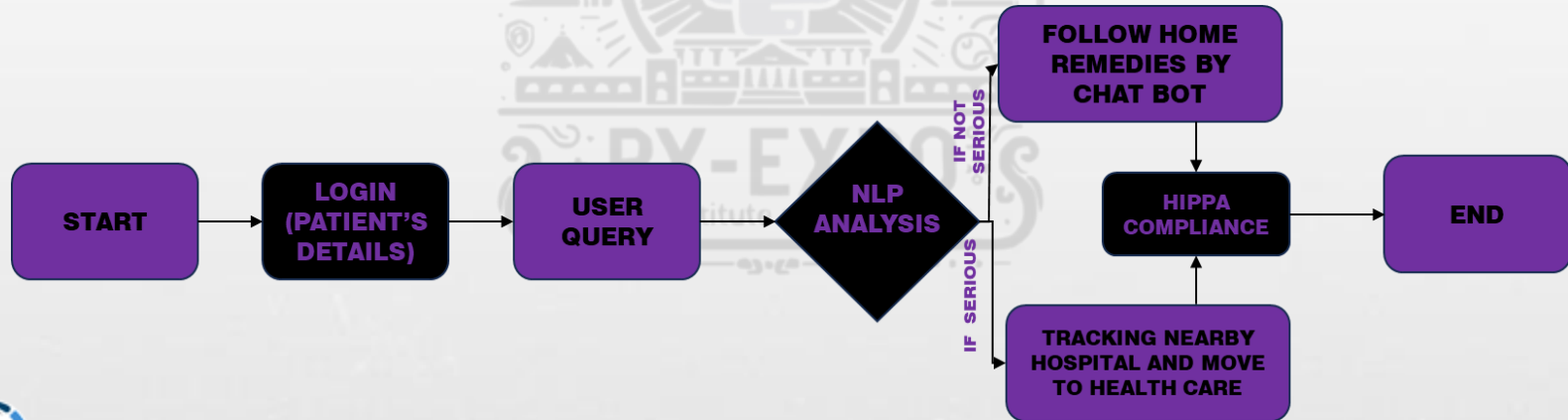 Provide users with quick access to basic healthcare assistance.

Proposed Solution and overview:

ADDRESS THE PROBLEM :

❖ Our chatbot provides symptom based disease prediction, **first aid tips and clinic suggestions**, reducing the burden on healthcare providers.
❖ Multi-Model Validation and Human-in-the-loop System.

APPROACH USED :

❖ Extracts symptoms & detects user intent.
❖ Predicts diseases based on symptoms.
❖ Fetches clinic locations and provides responses.

Data And Model :

DATA SOURCE :

Disease Symptom Description Dataset (Kaggle),Medical Symptoms Dataset,ICD-10 Dataset , MIMIC-III

ABOUT MODEL :

❖ NLP to interpret user symptoms.

❖ Train the Model using TensorFlow

❖ API Keys for clinic location

❖ RASA uses its own built-in NLP pipeline for data encoding.

TOOLS USED:

TensorFlow(Train deep learning model.)

NLP & Conversational AI

Text processing

Pandas & Numpy

Google maps API

Impact and Benefits:

- ❖ Reduced Healthcare cost.

- ❖ Enhanced Public health.

- ❖ Efficient Healthcare system.

- ❖ User – Empowerment.

- ❖ Resource Optimization.

- ❖ Reduce misdiagnosis risks through AI .

Ethical Considerations & Real-world Applications:

- ❖ Data privacy and Security . Avoiding incorrect or misleading health recommendations.

- ❖ Healthcare,telemedicine,Emergency response ,public Health Monitoring.

Team Member Details:

Name(TL) : Miruthula Shree S   Roll No : 24UAD161   Dept : AI&DS

Name   : Harini M   Roll No : 24UAD137   Dept : AI&DS

Name   : Gomathi C   Roll No : 24UAD132   Dep : AI&DS

Name   : Auslin Nausha R S   Roll No : 24UAD116   Dept : AI&DS

Name   : Janani T   Roll No : 24UAD142   Dept : AI&DS

Name   : Akshayaa S A   Roll No : 24UAD107   Dept : AI&DS

THANK YOU !