PULMO AID BOT

TruLens Innovations

Presented by *BuildwiseAi* Team

AGENDA

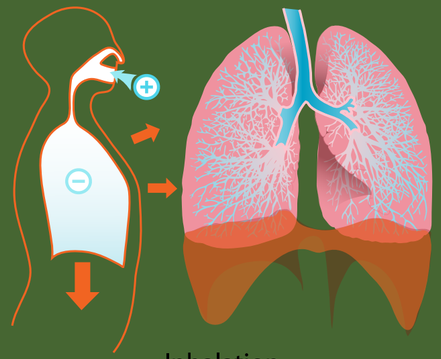
- Problem Statement
- Objectives
- Solution
- Process Stream
- Tools and Techniques
- Live Demo.
- Project Outcomes
- Future Perspective
- Meet the Team
- Thanks note

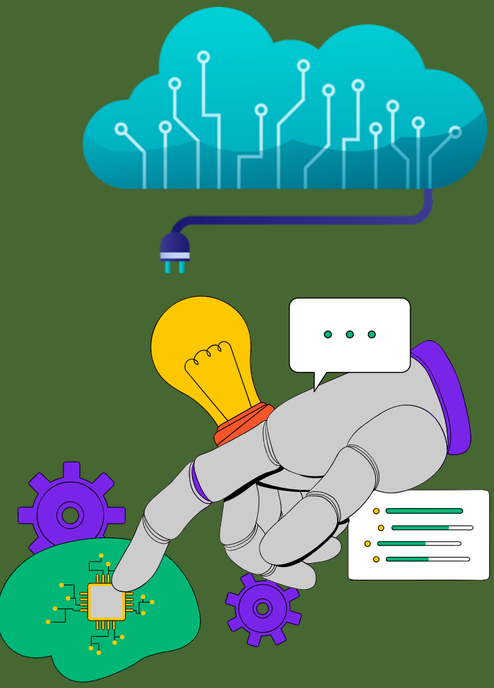
PROBLEM STAEMENT

Efficiently and accurately anticipating instant awareness of lung cancer remains a formidable task in healthcare, posing significant challenges for timely and intelligent initial prediction and diagnosis, especially for the common man.

OBJECTIVES

Empowering patients and physicians, our objective is to offer a questionnaire-type solution for lung cancer awareness, utilizing Generative AI to enhance accessibility and accuracy in healthcare through smart medical assistance.





SOLUTION

We address this challenge by developing a healthcare application that facilitates awareness through simple questioning about lung cancer symptoms, enabling early-stage diagnosis of the disease's presence in the lungs.

PROCESS STREAM

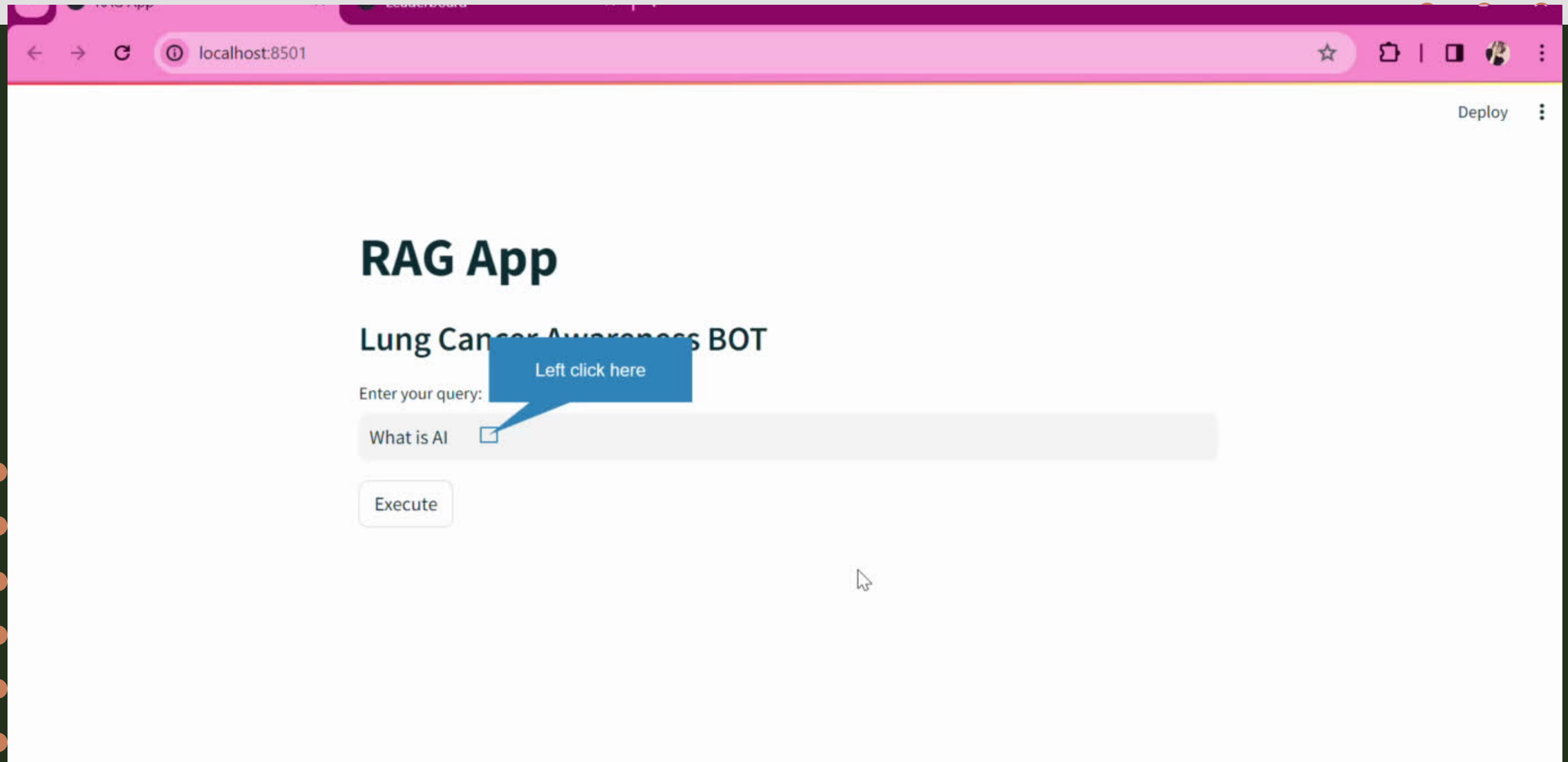
- Collecting and preprocessing lung cancer data
- Implementation with Generative AI Models
- Developing a Streamlit app to gather user queries and provide instant responses from the database.
- Running the Rag app and deploying it on TruLens.
- TruLens matches the responses with our database and provides us with hallucinations indicating the authenticity of our data

TOOLS & TECHNQUES

- Python
- Gpt 3.5 Models
- OpenAi Embedding model
- Streamlit APP
- TruLens Platform

Lung cancer data processed using Python, LLM implemented, Streamlit app developed, and deployed on TruLens platform for further integration with RAG app.

LIVE DEMOSTRATION



FINDINGS

- The TruLens model validates the responses obtained from the Streamlit app, ensuring authenticity.
- Patients and physicians utilizing the RaG Application receive authenticated responses.
- This app facilitates initial diagnosis of lung diseases and enhances awareness effectively.

FUTURE PERSPECTIVE

The Pulmo Aid bot can be expanded beyond prediction to provide holistic diagnosis, personalized treatment suggestions, and seamless integration with healthcare systems.

- **Multi-modality Integration.**
- **Integration with Electronic Health Records.**
- **Treatment Recommendation.**

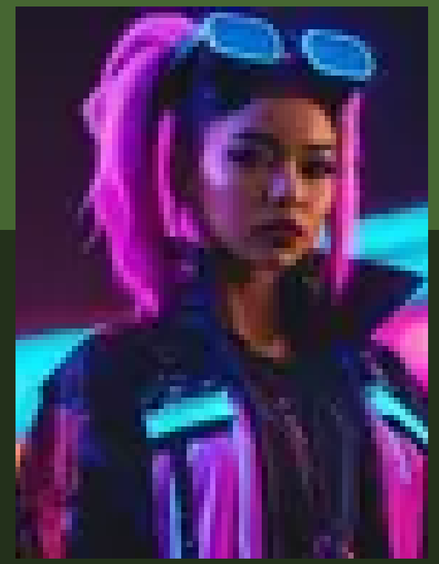
MEET THE TEAM

Osama Ghaffar
App. Developer (Python), Expert in ML and Generative AI

Rizwan Zhad
Expertise in Ml , DL tech stack: NLP, LLM

Amna Farooq
Computer Engineer (Data Science/Analyst, ML)

Rida Jabbar
Data Analyst



Rishika Rai
Data Scientist

THANK YOU