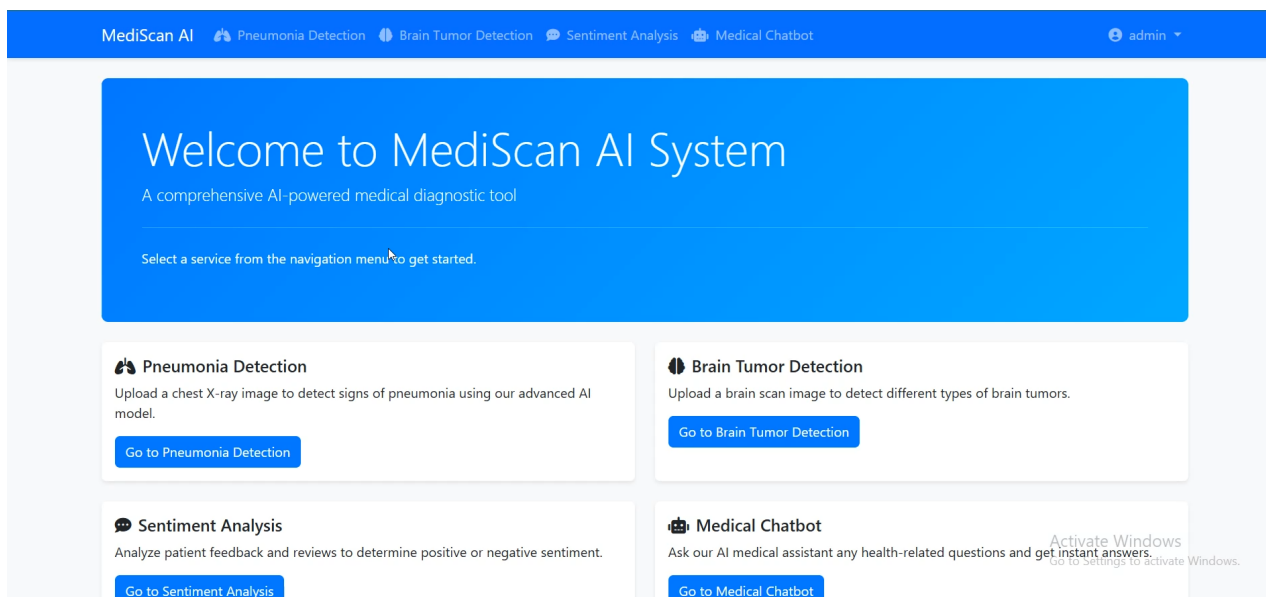


MediScan AI

This web app is designed to provide an accurate classification for brain tumor detection and classification, Pneumonia, sentiment analysis for feedback, and medical chatbot.

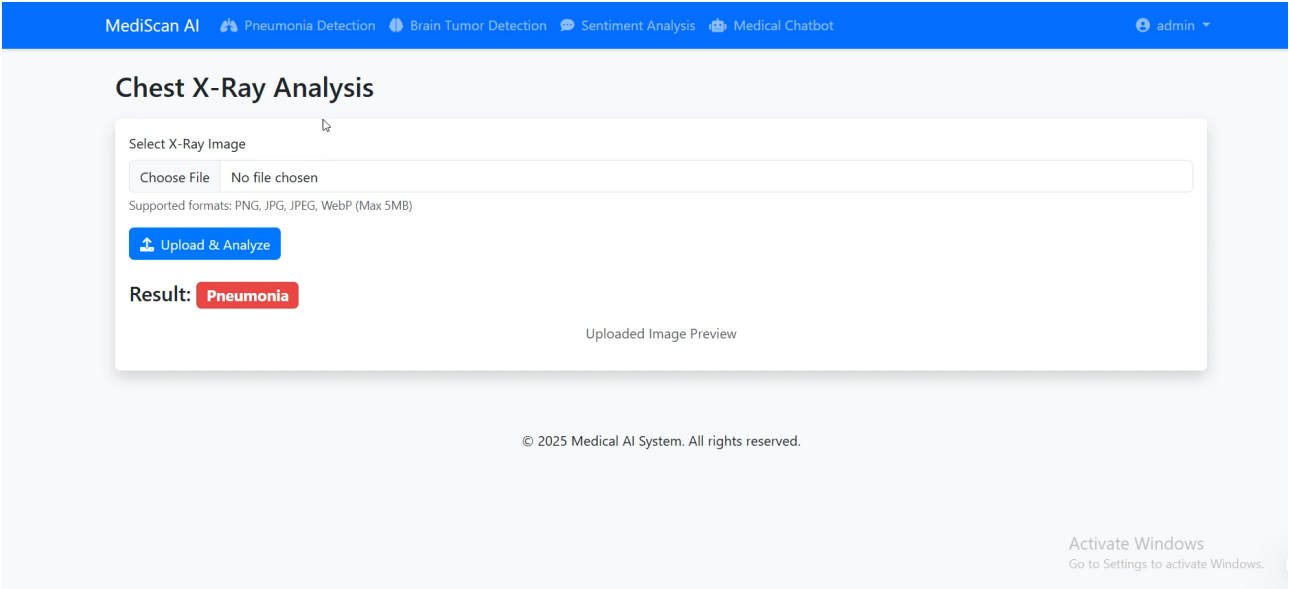
The website's layout is divided into four sections; Pneumonia detection, Brain tumor detection, chatbot powered by Qwen 1.8b LLM implemented using Ollama, and sentiment analysis using LSTM.

For the Pneumonia detection, user is to provide an X-ray scan image for the web app. In the backend, the trained model first preprocesses the image followed by image analysis and the result of the classification is provided for the user.

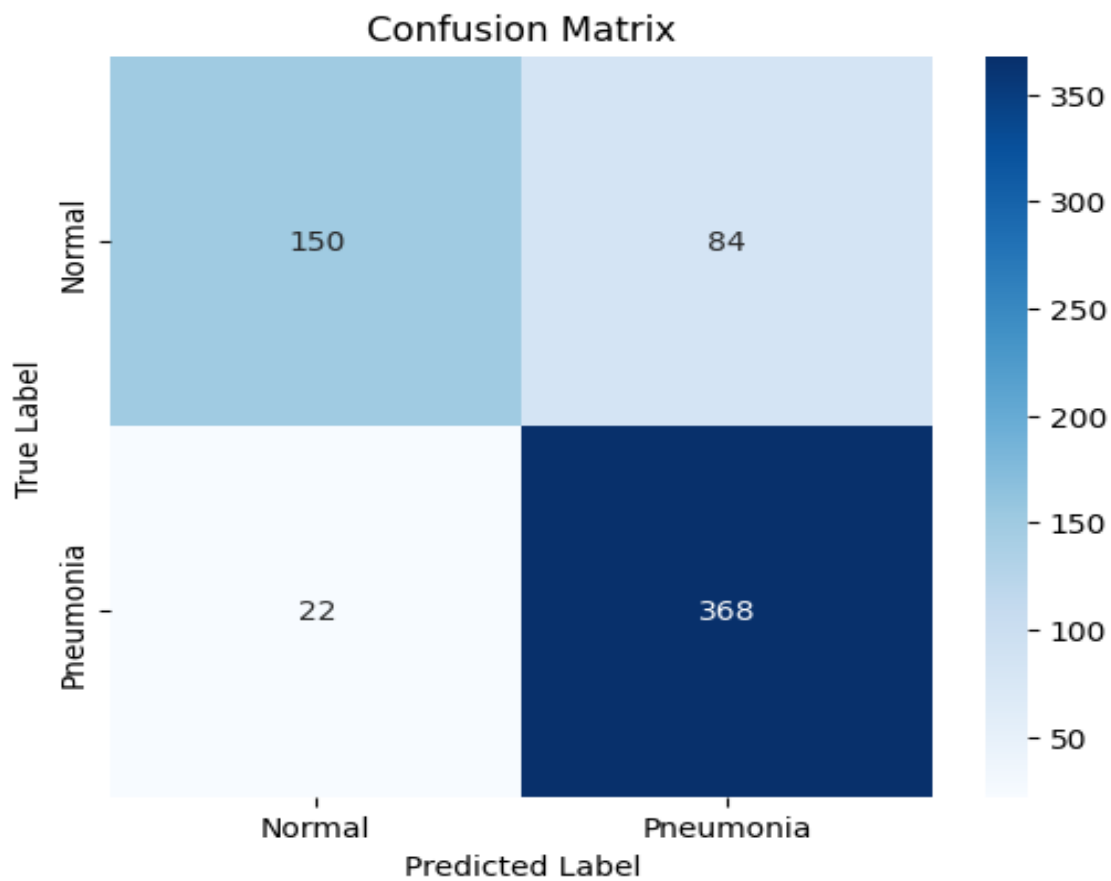


Pneumonia Detection

For this model, a dataset of 5,800 X-ray images of normal and case scans. A DenseNet model is implemented as the core image analysis. The model achieved accuracy of 88%.

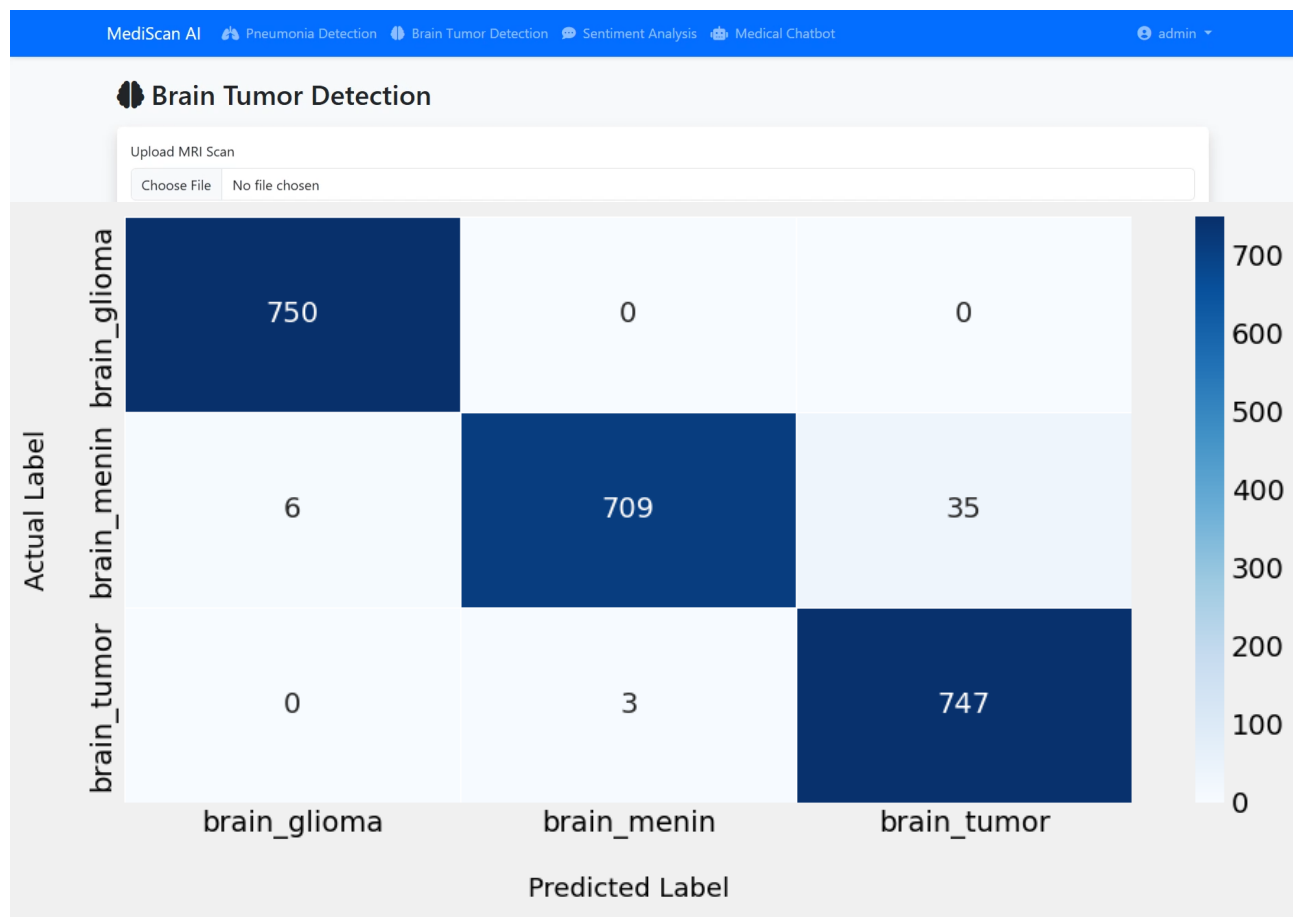


	precision	recall	f1-score	support
0	0.86	0.82	0.84	234
1	0.90	0.92	0.91	390
accuracy			0.88	624
macro avg	0.88	0.87	0.87	624
weighted avg	0.88	0.88	0.88	624



Brain Tumor Classification

For brain tumor classification, an MRI scan of the brain is provided, the classification is done using a model trained on 5000 images for three classes: Brain Glioma, Brain Menin, and Brain Tumors. The model has accuracy of 93% utilizing the transfer learning of the EfficientNet models.



	precision	recall	f1-score	support
brain_glioma	0.99	1.00	1.00	750
brain_menin	1.00	0.95	0.97	750
brain_tumor	0.96	1.00	0.98	750
accuracy			0.98	2250
macro avg	0.98	0.98	0.98	2250
weighted avg	0.98	0.98	0.98	2250

Medical Chatbot & Sentiment Analysis

For medical information, we used Qwen LLM powered chatbot to provide general information regarding topic of interest. We also used LSTM for sentiment analysis of medical reports.

MediScan AI

Pneumonia Detection

Brain Tumor Detection

Sentiment Analysis

Medical Chatbot

admin

Medical AI Chatbot

What are the symptoms of diabetes?

Diabetes is a chronic condition characterized by high blood sugar levels, often in the absence of physical activity or changes in diet. Some common symptoms of diabetes include: 1. Frequent thirst: One of the most noticeable symptoms of diabetes is frequent thirst, especially after meals and at night when you are trying to fall asleep. 2. Blurred vision: Another common symptom of diabetes is blurred vision, which can be caused by high blood sugar levels that cause damage to the retina in the eye. 3. Fatigue: Diabetes can also cause fatigue as a side effect. This fatigue can be particularly noticeable if you have worked long hours or are engaging in physically demanding activities. 4. Slow healing: Another common symptom of diabetes is slow healing, which refers to the fact that wounds on diabetic patients take longer to heal than wounds on non-diabetic patients. 5. Unexplained weight loss: One of the most significant symptoms of diabetes is unexplained weight loss, which refers to the fact that a person with diabetes may experience weight loss despite engaging in regular physical activity or making dietary changes.

Ask me anything medical-related... Send

MediScan AI

Pneumonia Detection

Brain Tumor Detection

Sentiment Analysis

Medical Chatbot

admin

Patient Feedback Analysis

Enter Patient Feedback

Enter patient feedback or review here...

Minimum 10 characters, maximum 1000 characters0/1000

Analyze Sentiment

Analysis Result:

Positive

94.0%

Original Text:

this is a good system

Activate Windows

Go to Settings to activate Windows.

