# DESIGN AND DEVELOP THE USER INTERFACE

### **PDF Includes the Following Sections:**

- 1. Project Introduction
- 2. Overview of IBM Granite
- 3. User Interface Requirements
- 4. Frontend UI Design (with Code)
- 5. Integration with IBM Granite
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### Sample UI Code (Streamlit)

We'll use **Streamlit** to build a simple UI for the Healthcare Assistant.

#### app.py

import streamlit as st

from ibm\_watsonx\_ai.foundation\_models import Model

from ibm\_watsonx\_ai import Credentials

# Set your credentials (replace with actual ones)

credentials = Credentials(api\_key="your-api-key", url="https://ussouth.ml.cloud.ibm.com")

# Load IBM Granite model

model = Model("ibm/granite-13b-chat-v2", credentials=credentials)

```
# Streamlit UI
st.set_page_config(page_title="Healthcare Assistant", layout="centered")
st.title("  AI Healthcare Assistant")
st.write("Ask health-related questions and get AI-powered answers!")
# User input
user_query = st.text_input("Enter your health question:")
# Button to process query
if st.button("Ask AI"):
  if user query:
    with st.spinner("Analyzing your question..."):
      response = model.generate(prompt=user query,
max_new_tokens=200)
      st.success("Answer:")
      st.write(response)
  else:
    st.warning("Please enter a question.")
```

### Sample UI Design Features

- Clean layout using Streamlit
- Text box for health-related questions
- IBM Granite model integration
- Display AI response in real-time
- Responsive design for desktop/tablet

## **How IBM Granite Is Used**

Model: granite-13b-chat-v2

Task: Medical Q&A / Natural Language Understanding

• Deployment: Via IBM watsonx.ai API



DESIGN FOR HEALTHCARE APPLICATIONS	
ADMIN	USER
Role-Based Access Control (RBAC)  Data Analytics Dashboard  Audit Trail and Logging  Integration with Health Information Systems (HIS)  Automated Task Management	Intuitive Patient Records     Management     Secure Messaging and     Communication     Telehealth Integration     Personalized User     Dashboards     Decision Support     Systems (DSS)

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