**Chatbot Code:**

1. import streamlit as st # type: ignore

2. import vertexai

3. from vertexai.generative\_models import GenerativeModel

4.

5. # Initialize Vertex AI

6. PROJECT\_ID = "unified-atom-441618-q6"

7. vertexai.init(project=PROJECT\_ID, location="us-central1")

8.

9. # Set up the Gemini model with a calming persona

10. model = GenerativeModel(

11.     "gemini-1.5-flash-002",

12.     system\_instruction="You are an empathetic friend and a calming meditation instructor."

13. )

14.

15. # Define chatbot functions

16.

17. def generate\_response(prompt):

18.     try:

19.         response = model.generate\_content(prompt)

20.         return response.text

21.     except Exception as e:

22.         st.error(f"Error generating response: {e}")

23.         return "I'm having trouble understanding. Can you try rephrasing?"

24.

25. def generate\_meditation\_script(type="deep breathing", duration=5, user\_name="friend"):

26.     prompt = (f"Create a {duration}-minute guided meditation focusing on {type}. "

27.               f"The script should be calming and reassuring, emphasizing relaxation and presence. "

28.               f"Address the user as '{user\_name}'.")

29.     return generate\_response(prompt)

30.

31. def provide\_stress\_advice():

32.     prompt = "Provide advice on managing stress and anxiety in a gentle, understanding tone."

33.     return generate\_response(prompt)

34.

35. def generate\_empathetic\_response(emotion):

36.     prompt = f"Offer a supportive and empathetic response for someone feeling {emotion}."

37.     return generate\_response(prompt)

38.

39. # Streamlit UI

40. st.title("Meditation & Wellness Chatbot")

41. st.write("Welcome! I'm here to help with meditation, stress advice, or just to chat.")

42.

43. # Initialize chat history and session state variables

44. if "chat\_history" not in st.session\_state:

45.     st.session\_state.chat\_history = []

46.

47. # Handle user input and response generation

48. user\_input = st.text\_input("How can I help you today?", key="user\_input")

49.

50. if st.button("Send") and user\_input:

51.     # Check user intent and respond accordingly

52.     if "meditation" in user\_input.lower():

53.         # Prompt for meditation details if not already set

54.         if "meditation\_type" not in st.session\_state:

55.             st.session\_state.meditation\_type = st.text\_input("What type of meditation? (e.g., deep breathing, body scan)")

56.             st.session\_state.meditation\_duration = st.number\_input("Duration in minutes", min\_value=1, max\_value=60, value=5)

57.         else:

58.             # Generate meditation script

59.             response = generate\_meditation\_script(type=st.session\_state.meditation\_type, duration=int(st.session\_state.meditation\_duration))

60.             st.session\_state.chat\_history.append(("User", user\_input))

61.             st.session\_state.chat\_history.append(("Chatbot", response))

62.             # Clear temporary variables

63.             del st.session\_state.meditation\_type

64.             del st.session\_state.meditation\_duration

65.

66.     elif "stress" in user\_input.lower():

67.         # Generate stress advice response

68.         response = provide\_stress\_advice()

69.         st.session\_state.chat\_history.append(("User", user\_input))

70.         st.session\_state.chat\_history.append(("Chatbot", response))

71.

72.     elif "feeling" in user\_input.lower():

73.         # Extract emotion from user input

74.         emotion = user\_input.lower().split("feeling")[-1].strip()

75.         if emotion:

76.             response = generate\_empathetic\_response(emotion)

77.             st.session\_state.chat\_history.append(("User", user\_input))

78.             st.session\_state.chat\_history.append(("Chatbot", response))

79.

80.     else:

81.         # General response for other input

82.         response = generate\_response(user\_input)

83.         st.session\_state.chat\_history.append(("User", user\_input))

84.         st.session\_state.chat\_history.append(("Chatbot", response))

85.

86. # Display conversation history

87. for sender, message in st.session\_state.chat\_history:

88.     if sender == "User":

89.         st.write(f"\*\*You:\*\* {message}")

90.     else:

91.         st.write(f"\*\*Chatbot:\*\* {message}")

92.

93.

**1. Overview**

The code implements a chatbot using **Streamlit** for the UI and **Google's Vertex AI** to provide generative responses. The chatbot focuses on wellness by offering meditation guidance, stress management advice, and empathetic conversations. It uses the **Gemini model** for content generation with a calming and empathetic persona.

**2. Explanation of Code Components**

**2.1 Imports and Initialization**

1. import streamlit as st # type: ignore

2. import vertexai

3. from vertexai.generative\_models import GenerativeModel

4.

* **Streamlit** provides the interactive web-based UI.
* **Vertex AI and GenerativeModel** handle generative AI functionalities. The code sets up the **Gemini model** with a specific persona.

1. PROJECT\_ID = "unified-atom-441618-q6"

2. vertexai.init(project=PROJECT\_ID, location="us-central1")

3.

* **PROJECT\_ID and location** specify the Google Cloud project and region. This ensures communication with the appropriate Vertex AI instance.

**2.2 Setting Up the Model**

1. model = GenerativeModel(

2. "gemini-1.5-flash-002",

3. system\_instruction="You are an empathetic friend and a calming meditation instructor."

4. )

5.

* **GenerativeModel** initializes the Gemini model for generating content. The system\_instruction defines its persona as empathetic and calming, tailoring its responses.

**2.3 Chatbot Functions**

The key functions are:

* **generate\_response(prompt)**: Generates general responses for user prompts using the Gemini model.
* **generate\_meditation\_script**: Creates guided meditation scripts by specifying type (e.g., "deep breathing") and duration.
* **provide\_stress\_advice**: Offers stress management tips in a gentle tone.
* **generate\_empathetic\_response**: Responds empathetically to specific emotions extracted from user input.

Each function uses the generate\_response helper function to retrieve AI-generated text.

**2.4 Streamlit UI and User Interaction**

* **Title and Introduction**: The UI starts with a title and brief introduction.
* **Chat History Management**: Uses **Streamlit's session state** to maintain conversation history persistently across user interactions.

if "chat\_history" not in st.session\_state:

st.session\_state.chat\_history = []

* **User Input Handling**: Captures user input via a text field (st.text\_input) and a button to trigger processing.
* **Intent Recognition**: Analyzes user input to determine the intent:
  + **Meditation Request**: Prompts users to specify meditation type and duration before generating a meditation script.
  + **Stress Advice Request**: Calls the provide\_stress\_advice function.
  + **Emotion Support**: Detects emotional expressions to generate empathetic responses.
  + **Fallback Handling**: Generates a general response for unrecognized inputs.
* **Chat Display**: Displays user-bot conversation history in an intuitive format using Streamlit components.

**3. Strengths**

1. **Modular Design**:
   * Functions are separated by functionality, ensuring code is modular and easy to extend.
2. **Personalization**:
   * Meditation scripts and empathetic responses are tailored to user preferences (e.g., type of meditation, emotion).
3. **Streamlit Integration**:
   * Provides a clean and user-friendly interface for the chatbot.
4. **Error Handling**:
   * Includes basic error handling in generate\_response to address potential model failures.

**4. Areas for Improvement**

1. **Input Validation**:
   * The code does not validate user inputs (e.g., meditation types, emotions). This can lead to incorrect or suboptimal responses.
   * **Solution**: Add input validation (e.g., predefined options for meditation types).
2. **Error Feedback**:
   * While errors are caught, the feedback to users is generic.
   * **Solution**: Display meaningful error messages or retry suggestions.
3. **Session State Management**:
   * Temporary variables (meditation\_type, meditation\_duration) are cleared manually, which is error-prone.
   * **Solution**: Use a structured approach to manage session state variables.
4. **Performance**:
   * Generating responses for every interaction may increase latency.
   * **Solution**: Cache frequently requested responses (e.g., standard stress advice).
5. **Security**:
   * The PROJECT\_ID is hardcoded, which could expose the project to unauthorized access.
   * **Solution**: Store sensitive credentials in environment variables or a secure configuration file.
6. **UI Enhancements**:
   * The UI does not provide clear feedback when awaiting responses.
   * **Solution**: Add a loading spinner or message for better user experience.

**5. Possible Extensions**

1. **Broader Functionality**:
   * Include features like mood tracking or gratitude journaling.
2. **Advanced Personalization**:
   * Allow users to set persistent preferences for tone, meditation type, or duration.
3. **Analytics**:
   * Track interaction trends to refine chatbot responses over time.
4. **Voice Input/Output**:
   * Support voice commands for a more immersive experience.

**Website Code:**

**Index.html:**

1. <!DOCTYPE HTML>

2.

3. <html>

4.     <head>

5.         <!-- The title of the webpage as it will appear on the browser tab -->

6.         <title>MART-B</title>

7.

8.         <!-- Specifies the character encoding for the document -->

9.         <meta charset="utf-8" />

10.

11.         <!-- Ensures the webpage is responsive and scales properly on all devices -->

12.         <meta name="viewport" content="width=device-width, initial-scale=1, user-scalable=no" />

13.

14.         <!-- Links the main CSS stylesheet for styling the page -->

15.         <link rel="stylesheet" href="assets/css/main.css" />

16.

17.         <!-- Links an alternative CSS file for when JavaScript is disabled -->

18.         <noscript><link rel="stylesheet" href="assets/css/noscript.css" /></noscript>

19.     </head>

20.     <body class="is-preload">

21.         <!-- 'is-preload' is likely a class used for applying initial styles before the page is fully loaded -->

22.

23.         <!-- Sidebar section -->

24.         <section id="sidebar">

25.             <div class="inner">

26.                 <nav>

27.                     <ul>

28.                         <!-- Links to the intro and 'What We Do' sections of the page -->

29.                         <li><a href="#intro">Welcome</a></li>

30.                         <li><a href="#one">What We Do</a></li>

31.                     </ul>

32.                 </nav>

33.             </div>

34.         </section>

35.

36.         <!-- Wrapper that contains the main content -->

37.         <div id="wrapper">

38.

39.             <!-- Introduction section -->

40.             <section id="intro" class="wrapper style1 fullscreen fade-up">

41.                 <div class="inner">

42.                     <!-- The main title of the webpage -->

43.                     <h1>MART-B</h1>

44.

45.                     <!-- Brief description of the project -->

46.                     <p>Welcome to the home of Meditation Assistant with Real Time Biofeedback also known as MART-B, a stress monitoring system with a meditation assistant to help you relax and focus.</p>

47.

48.                     <!-- Action button to navigate to the next section -->

49.                     <ul class="actions">

50.                         <li><a href="#one" class="button scrolly">Learn more</a></li>

51.                     </ul>

52.                 </div>

53.             </section>

54.

55.             <!-- Section explaining the purpose and features of the project -->

56.             <section id="one" class="wrapper style2 spotlights">

57.                 <section>

58.                     <!-- Image for visual appeal -->

59.                     <a href="#" class="image"><img src="images/pic01.jpg" alt="" data-position="center center" /></a>

60.

61.                     <div class="content">

62.                         <div class="inner">

63.                             <!-- Subheading: Why the project exists -->

64.                             <h2>Why?</h2>

65.

66.                             <!-- Explanation of the problem the project addresses -->

67.                             <p>In the fast-paced lifestyle of the present, chronic stress has become extremely common, affecting the physical and mental wellbeing of many individuals. To deal with this, many people turn to meditation as a solution. However, without instant real-time feedback, it can be difficult for people to gauge their stress levels and the effectiveness of their meditation routines. </p>

68.

69.                             <!-- Action button linking to more information -->

70.                             <ul class="actions">

71.                                 <li><a href="info.html" class="button">Learn more</a></li>

72.                             </ul>

73.                         </div>

74.                     </div>

75.                 </section>

76.

77.                 <section>

78.                     <!-- Another image for visual interest -->

79.                     <a href="#" class="image"><img src="images/pic02.jpg" alt="" data-position="top center" /></a>

80.

81.                     <div class="content">

82.                         <div class="inner">

83.                             <!-- Subheading: The solution offered by the project -->

84.                             <h2>Our Solution</h2>

85.

86.                             <!-- Description of how the project solves the problem -->

87.                             <p>Our project aims to address this problem by developing a stress monitor using the Adafruit Circuit Playground Classic. This project will provide users with real-time biofeedback on their stress levels during meditation sessions utilizing heart rate, enabling them to adjust their techniques and achieve a more effective and personalized meditation experience. </p>

88.

89.                             <!-- Action button linking to more details -->

90.                             <ul class="actions">

91.                                 <li><a href="generic.html" class="button">Learn more</a></li>

92.                             </ul>

93.                         </div>

94.                     </div>

95.                 </section>

96.

97.                 <section>

98.                     <!-- Another visual element -->

99.                     <a href="#" class="image"><img src="images/pic03.jpg" alt="" data-position="25% 25%" /></a>

100.

101.                     <div class="content">

102.                         <div class="inner">

103.                             <!-- Subheading: Meditation guidance -->

104.                             <h2>Your Meditation Guide</h2>

105.

106.                             <!-- Details about the chatbot feature -->

107.                             <p>Using Gemini's API, we have made a chatbot to assist users in their meditation routines. Not just that, the chatbot is there as a friend to listen and help you refocus and relax.</p>

108.

109.                             <!-- Disclaimer for users -->

110.                             <p>Disclaimer: It is not a substitute for licensed therapist.</p>

111.

112.                             <!-- Action button linking to the chatbot application -->

113.                             <ul class="actions">

114.                                 <li><a href="https://gembot-yrht3mksggg7ucnsncjmkp.streamlit.app/" class="button">Learn more</a></li>

115.                             </ul>

116.                         </div>

117.                     </div>

118.                 </section>

119.             </section>

120.

121.         <!-- Footer section -->

122.         <footer id="footer" class="wrapper style1-alt">

123.             <div class="inner">

124.                 <ul class="menu">

125.                     <!-- Footer content: Project name -->

126.                     <li>MART-B</li>

127.                 </ul>

128.             </div>

129.         </footer>

130.

131.         <!-- JavaScript files for interactive features -->

132.         <script src="assets/js/jquery.min.js"></script>

133.         <script src="assets/js/jquery.scrollex.min.js"></script>

134.         <script src="assets/js/jquery.scrolly.min.js"></script>

135.         <script src="assets/js/browser.min.js"></script>

136.         <script src="assets/js/breakpoints.min.js"></script>

137.         <script src="assets/js/util.js"></script>

138.         <script src="assets/js/main.js"></script>

139.     </body>

140. </html>

141.

142.

**Info.html:**

1. <!DOCTYPE HTML>

2. <!-- HTML5 document structure begins -->

3.

4. <html>

5.     <head>

6.         <title>Deep Dive</title> <!-- Page title displayed on the browser tab -->

7.         <meta charset="utf-8" /> <!-- Specifies the character encoding as UTF-8 -->

8.         <meta name="viewport" content="width=device-width, initial-scale=1, user-scalable=no" /> <!-- Responsive viewport for mobile devices -->

9.         <link rel="stylesheet" href="assets/css/main.css" /> <!-- Links the main stylesheet for styling -->

10.         <noscript><link rel="stylesheet" href="assets/css/noscript.css" /></noscript> <!-- Fallback CSS for users with JavaScript disabled -->

11.     </head>

12.     <body class="is-preload"> <!-- Body with preload class applied for initial animations -->

13.

14.         <!-- Header -->

15.             <header id="header"> <!-- Website header -->

16.                 <a href="index.html" class="title">Back to Home</a> <!-- Link to navigate back to the homepage -->

17.                 <nav> <!-- Navigation menu -->

18.                     <ul>

19.                         <li><a href="index.html">Home</a></li> <!-- Navigation item: Home -->

20.                         <li><a href="info.html" class="active">Info</a></li> <!-- Navigation item: Info (currently active) -->

21.                         <li><a href="generic.html">Monitor Stress</a></li> <!-- Navigation item: Monitor Stress -->

22.                         <li><a href="https://gembot-yrht3mksggg7ucnsncjmkp.streamlit.app/">Chatbot</a></li> <!-- Navigation item: External Chatbot link -->

23.                     </ul>

24.                 </nav>

25.             </header>

26.

27.         <!-- Wrapper -->

28.             <div id="wrapper"> <!-- Central container for content -->

29.

30.                 <!-- Main -->

31.                     <section id="main" class="wrapper"> <!-- Main content area -->

32.                         <div class="inner"> <!-- Inner container for padding -->

33.                             <h1 class="major">Deep Dive</h1> <!-- Main heading -->

34.                             <p>Stress is an unavoidable part of modern life...</p> <!-- Brief overview of stress and its impacts -->

35.                             <p>The following statistics highlight how widespread high-stress levels have become:</p>

36.                             <ol>

37.                                 <li>K-12 Students: In the United States, 45% of high school students report feeling stressed "all the time" or "most of the time" due to schoolwork.</li>

38.                                 <li>College Students: The American College Health Association (ACHA) found that 77% of college students experienced some form of psychological distress, either moderate or severe.</li>

39.                                 <li>Mental Health Impact: During the 2020-2021 school year, more than 60% of college students met the criteria for at least one mental health problem.</li>

40.                                 <li>Stressful Life Events: Three out of four students reported experiencing at least one stressful life event in the past year, with more than 20% experiencing six or more stressful events.</li>

41.                                 <li>Sleep and Stress: Students who sleep six or fewer hours a night have lower GPAs compared to those who get eight or more hours of sleep.</li>

42.                                 <li>Financial Stress: 24% of students in the United States are stressed about their future and finding a job after graduation.</li>

43.                                 <li>Loneliness: 54% of college students reported experiencing loneliness.</li>

44.                                 <li>Suicidal Behavior: 30% of college students exhibited suicidal behavior.</li>

45.                                 <li>Anxiety and Depression: 35% of college students reported being diagnosed with anxiety, and 27% reported experiencing depression.</li>

46.                             </ol>

47.

48.                         </div>

49.                     </section>

50.

51.             </div>

52.

53.         <!-- Footer -->

54.             <footer id="footer" class="wrapper alt"> <!-- Website footer -->

55.                 <div class="inner">

56.                     <ul class="menu">

57.                         <li>MART-B</li> <!-- Branding or site reference -->

58.                     </ul>

59.                 </div>

60.             </footer>

61.

62.         <!-- Scripts -->

63.             <script src="assets/js/jquery.min.js"></script> <!-- Core jQuery library -->

64.             <script src="assets/js/jquery.scrollex.min.js"></script> <!-- Plugin for scrolling animations -->

65.             <script src="assets/js/jquery.scrolly.min.js"></script> <!-- Plugin for smooth scrolling -->

66.             <script src="assets/js/browser.min.js"></script> <!-- Browser compatibility handling -->

67.             <script src="assets/js/breakpoints.min.js"></script> <!-- Script for responsive breakpoints -->

68.             <script src="assets/js/util.js"></script> <!-- Utility functions -->

69.             <script src="assets/js/main.js"></script> <!-- Main JavaScript file -->

70.     </body>

71. </html>

72.

73.

**Generic.html:**

1. <!DOCTYPE HTML>

2. <!-- HTML5 document structure begins -->

3.

4. <html>

5.     <head>

6.         <title>STRESS MONITOR</title> <!-- Page title displayed on the browser tab -->

7.         <meta charset="utf-8" /> <!-- Specifies the character encoding as UTF-8 -->

8.         <meta name="viewport" content="width=device-width, initial-scale=1, user-scalable=no" /> <!-- Responsive viewport for mobile devices -->

9.         <link rel="stylesheet" href="assets/css/main.css" /> <!-- Links the main stylesheet for styling -->

10.         <noscript><link rel="stylesheet" href="assets/css/noscript.css" /></noscript> <!-- Fallback CSS for users with JavaScript disabled -->

11.     </head>

12.     <body class="is-preload"> <!-- Body with preload class applied for initial animations -->

13.

14.         <!-- Header -->

15.             <header id="header"> <!-- Website header -->

16.                 <a href="index.html" class="title">Back to Home</a> <!-- Link to navigate back to the homepage -->

17.                 <nav> <!-- Navigation menu -->

18.                     <ul>

19.                         <li><a href="index.html">Home</a></li> <!-- Navigation item: Home -->

20.                         <li><a href="generic.html" class="active">Monitor Stress</a></li> <!-- Navigation item: Monitor Stress (currently active) -->

21.                         <li><a href="https://gembot-yrht3mksggg7ucnsncjmkp.streamlit.app/">Chatbot</a></li> <!-- Navigation item: External Chatbot link -->

22.                         <li><a href="info.html">Info</a></li> <!-- Navigation item: Info -->

23.                     </ul>

24.                 </nav>

25.             </header>

26.

27.         <!-- Wrapper -->

28.             <div id="wrapper"> <!-- Central container for content -->

29.

30.                 <!-- Main -->

31.                     <section id="main" class="wrapper"> <!-- Main content area -->

32.                         <div class="inner"> <!-- Inner container for padding -->

33.                             <h1 class="major">User Guide</h1> <!-- Main heading -->

34.                             <h2>Please read the guide below to operate the device:</h2> <!-- Subheading -->

35.                             <p>Welcome to MART-B! Your go-to ecosystem  after a long day of work to refocus and relax.</p> <!-- Introduction to the product -->

36.

37.                             <!-- Instructions on the device's functionalities -->

38.                             <ol>

39.                                 <li>Stress Monitor:</li> <!-- Details of stress monitoring modes -->

40.                                 <ul>

41.                                     <li>a. Visual Mode: The lights on the Adafruit will update every 15 seconds to indicate your stress levels. Red - Stressed; Yellow - Tense; Green - Relaxed</li>

42.                                     <li>b. Audio Mode: The device beeps and the frequency of beeping will change to reflect your stress levels. High Frequency - Stressed; Low Frequency - Relaxed</li>

43.                                 </ul>

44.                                 <li>Meditation Assistance:</li> <!-- Details of meditation assistance modes -->

45.                                 <ul>

46.                                     <li>a. Visual Mode: Sync your breathing (inhale-exhale) with the lights on the device</li>

47.                                     <li>b. Audio Mode: Sync your breathing to the beeping. Switch between inhale-exhale when the frequency changes.</li>

48.                                 </ul>

49.                             </ol>

50.

51.                             <p>To get started, press both buttons on the Adafruit together! Then, follow the instructions on the serial monitor to relax. Happy Relaxing! </p>

52.                         </div>

53.                     </section>

54.

55.             </div>

56.

57.         <!-- Footer -->

58.             <footer id="footer" class="wrapper alt"> <!-- Website footer -->

59.                 <div class="inner">

60.                     <ul class="menu">

61.                         <li>MART-B</li> <!-- Branding or site reference -->

62.                     </ul>

63.                 </div>

64.             </footer>

65.

66.         <!-- Scripts -->

67.             <script src="assets/js/jquery.min.js"></script> <!-- Core jQuery library -->

68.             <script src="assets/js/jquery.scrollex.min.js"></script> <!-- Plugin for scrolling animations -->

69.             <script src="assets/js/jquery.scrolly.min.js"></script> <!-- Plugin for smooth scrolling -->

70.             <script src="assets/js/browser.min.js"></script> <!-- Browser compatibility handling -->

71.             <script src="assets/js/breakpoints.min.js"></script> <!-- Script for responsive breakpoints -->

72.             <script src="assets/js/util.js"></script> <!-- Utility functions -->

73.             <script src="assets/js/main.js"></script> <!-- Main JavaScript file -->

74.     </body>

75. </html>

76.

77.

**Explanation:**

**1. Overview of index.html**

The index.html file is the **homepage** of the MART-B website. It introduces users to the platform, explaining its purpose and features. The structure includes a sidebar navigation menu, a main introduction section, and additional content on the project's goals and solutions.

**Code Explanation**

**Head Section**

1. <head>

2. <title>MART-B</title>

3. <meta charset="utf-8" />

4. <meta name="viewport" content="width=device-width, initial-scale=1, user-scalable=no" />

5. <link rel="stylesheet" href="assets/css/main.css" />

6. <noscript><link rel="stylesheet" href="assets/css/noscript.css" /></noscript>

7. </head>

8. Defines the page title (MART-B) that appears on the browser tab.

9. Sets character encoding to UTF-8 for compatibility with various languages.

10. Ensures mobile responsiveness using the viewport meta tag.

11. Links external stylesheets for styling:

12. main.css for the primary design.

13. noscript.css for fallback styling when JavaScript is disabled.

14.

**Sidebar**

<section id="sidebar">

<div class="inner">

<nav>

<ul>

<li><a href="#intro">Welcome</a></li>

<li><a href="#one">What We Do</a></li>

</ul>

</nav>

</div>

</section>

* Provides a **navigation menu** for quick access to sections within the page.
* Uses <a href="#intro"> and <a href="#one"> for **internal links** to the "Welcome" and "What We Do" sections.

**Introduction Section**

1. <section id="intro" class="wrapper style1 fullscreen fade-up">

2. <div class="inner">

3. <h1>MART-B</h1>

4. <p>Welcome to the home of Meditation Assistant with Real Time Biofeedback...</p>

5. <ul class="actions">

6. <li><a href="#one" class="button scrolly">Learn more</a></li>

7. </ul>

8. </div>

9. </section>

10.

* Introduces the project with a title (<h1>) and description (<p>).
* A button with the class scrolly provides smooth scrolling to the "What We Do" section.

**Spotlight Sections**

1. <section id="one" class="wrapper style2 spotlights">

2. <!-- Subsections go here -->

3. </section>

4.

* Contains multiple subsections explaining:
  1. The **problem** MART-B addresses.
  2. MART-B's **solution** using the Adafruit Circuit Playground.
  3. Integration with the Gemini chatbot for **meditation guidance**.

Each subsection includes an image (<a class="image">), a title (<h2>), descriptive text (<p>), and a button linking to additional content.

**Footer**

1. <footer id="footer" class="wrapper style1-alt">

2. <div class="inner">

3. <ul class="menu">

4. <li>MART-B</li>

5. </ul>

6. </div>

7. </footer>

8.

* Displays the project name at the bottom of the page.

**Scripts**

<script src="assets/js/jquery.min.js"></script>

<script src="assets/js/main.js"></script>

* Includes external JavaScript files for interactivity and animations.

**2. Overview of info.html**

The info.html page provides a **detailed look at stress statistics**, which highlight the relevance of MART-B.

**Code Explanation**

**Header and Navigation**

Similar to index.html, it includes:

* A header with a navigation menu linking to the homepage, the chatbot, and the user guide.

**Main Content**

1. <section id="main" class="wrapper">

2. <div class="inner">

3. <h1 class="major">Deep Dive</h1>

4. <p>Stress is an unavoidable part of modern life...</p>

5. <ol>

6. <li>K-12 Students: 45% of high school students...</li>

7. <li>College Students: 77% of college students...</li>

8. <li>Suicidal Behavior: 30% of college students...</li>

9. </ol>

10. </div>

11. </section>

12.

* The <h1> tag introduces the topic: "Deep Dive."
* Provides textual insights into the prevalence of stress.
* Uses an <ol> element for structured, easy-to-read statistics.

**Footer and Scripts**

Identical to index.html.

**3. Overview of generic.html**

The generic.html file serves as the **user guide** for MART-B, explaining how to operate the device and use its features.

**Code Explanation**

**Main Content**

1. <section id="main" class="wrapper">

2. <div class="inner">

3. <h1 class="major">User Guide</h1>

4. <h2>Please read the guide below to operate the device:</h2>

5. <p>Welcome to MART-B!...</p>

6. <ol>

7. <li>Stress Monitor:</li>

8. <ul>

9. <li>Visual Mode: Lights on the Adafruit...</li>

10. <li>Audio Mode: Beeping frequency...</li>

11. </ul>

12. <li>Meditation Assistance:</li>

13. <ul>

14. <li>Visual Mode: Sync breathing with lights...</li>

15. <li>Audio Mode: Sync breathing with beeping...</li>

16. </ul>

17. </ol>

18. <p>To get started, press both buttons...</p>

19. </div>

20. </section>

21.

* **Instructions**: The user guide is divided into two primary modes:
  1. **Stress Monitor**: Uses lights or beeps to indicate stress levels.
  2. **Meditation Assistance**: Guides users to sync their breathing with visual/auditory cues.
* Each mode is detailed using a nested ordered (<ol>) and unordered list (<ul>).

**Footer and Scripts**

Similar to the other files.

**4. Key Commonalities**

* **Structure**: All files follow a consistent layout with headers, navigation menus, main content, and footers.
* **Styling and Interactivity**: Reliance on external CSS and JavaScript for responsive design and animations.
* **Purpose**:
  + index.html: Introduction and overview.
  + info.html: Background and statistics.
  + generic.html: User instructions.

References:  
1. Codecademy

2. FreeCodeCamp

3. Programming with Mosh

4. SuperSimpleDev

5. Corey Schafer

6. Tech with Tim

7. SentDex

8. RealPython

9. Australian Heart Foundation

10. American Psychology Association

11. Adafruit Documentation