MIND MATTERS

A Real-Time / Field-Based Research Project (22DT284) report submitted to the Jawaharlal Nehru Technological University, Hyderabad

Submitted by

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DEPARTMENT OF CSE (DATA SCIENCE)

CVR COLLEGE OF ENGINEERING

(An Autonomous Institution, NAAC Accredited and Affiliated to JNTUH, Hyderabad)

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Rangareddy (D), Telangana- 501 510

JUNE 2024

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CERTIFICATE

This is to certify that the Real time/ Field-Based research project(22DT284) report entitled "MIND MATTERS" is a record of work carried out by U.HasinePriya, K. Likitha, P. Srinidhi submitted to Department of CSE (DATA SCIENCE), CVR College of Engineering, affiliated to Jawaharlal Nehru Technological University, Hyderabad during the year 2023-2024.

Project Guide

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Assistant professor CSE(DATA SCIENCE)

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Dr. Hanumanth Rao

Head of the Department Dr. Lakshmi H N

Professor & HOD CSE(AI&ML, DS,CS)

DECLARATION

We hereby declare that the Real time/ Field-Based research project (22DT284) report entitled "MIND MATTERS" is an original work done and submitted to CSE (DATA SCIENCE) Department, CVR College of Engineering, affiliated to Jawaharlal Nehru Technological University, Hyderabad and it is a record of bonafide project work carried out by us under the guidance of Mr. V. PRAVEEN KUMAR, ASST PROFESSOR, CSE(DATA SCIENCE).

We further declare that the work reported in this project has not been submitted, either in part or in full, for the award of any other degree or diploma in this Institute or any other Institute or University.

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ABSTRACT

Mind Matters is an innovative online platform dedicated to mental health awareness and education through engaging quizzes. In today's world, where mental health challenges are prevalent, accessible resources are vital. Our platform offers an interactive experience that empowers users to prioritize their mental well-being. With thought-provoking questions, users explore topics like anxiety, depression, stress, and coping mechanisms. Designed for diverse backgrounds, Mind Matters fosters self-discovery and empowerment with its user-friendly interface and expert content. Join us on the journey to better mental health today!

Key Features:

- Engaging quiz questions
- User-friendly interface
- Personalized results
- Informative content

1.INTRODUCTION

Understanding mental health is crucial for overall well-being, affecting our thoughts, emotions, and behaviors. However, it often faces neglect or stigma, leaving many individuals to suffer silently. In today's fast-paced world, challenges like anxiety, depression, and stress are increasingly common, affecting people from all walks of life. This underscores the pressing need for accessible and effective mental health resources.

Mind Matters emerges as an innovative online platform dedicated to addressing this need. It is committed to promoting mental health awareness and education, offering personalized insights through its unique mental health quiz. Unlike traditional approaches, Mind Matters provides brief yet comprehensive information about mental health topics, empowering users to understand and address their mental well-being.

At the heart of Mind Matters lies its interactive quiz, strategically designed to assess an individual's mental health status. This single quiz comprises 30 questions, carefully crafted to differentiate between three distinct levels of mental well-being. By engaging with this quiz, users gain personalized insights into their mental health, allowing them to identify areas of strength and areas that may require additional attention. Mind Matters is committed to inclusivity and accessibility, ensuring that individuals from diverse backgrounds can benefit from its services. The platform's user-friendly interface and culturally sensitive approach make it easy for users to navigate and engage with its content, regardless of their background or level of familiarity with mental health concepts. Empowerment lies at the core of Mind Matters. By providing personalized insights based on the results of the mental health quiz, the platform equips users with the knowledge and resources they need to take proactive steps towards improving their mental well-being. Whether it's managing stress, addressing anxiety, or seeking support for depression, Mind Matters offers practical guidance tailored to the individual's unique needs and circumstances. Join us in our mission to promote mental health awareness and empower individuals to lead happier, healthier lives with Mind Matters.

1.1 Problem Statement

In today's fast-paced world, mental health challenges such as anxiety, depression, and stress are increasingly common. Despite the growing awareness, many individuals still lack access to resources that can help them understand and manage their mental health. Traditional educational materials can be unappealing, leading to a lack of engagement and motivation to learn. There is a need for an innovative solution that makes mental health education accessible, engaging, and effective.

1.2 Project Objectives

The primary objective of Mind Matters is to provide an engaging, user-friendly platform for mental health education. Specific objectives include:

- Creating an interactive experience through quizzes that educate users about mental health topics.
- Ensuring the platform is accessible to users from diverse backgrounds.
- Providing personalized feedback and resources based on quiz results.
- Promoting self-discovery and empowerment through expert content and a supportive user interface.

1.3 Software and Hardware specifications

1.3.1 Software Requirements

- **Frontend**: HTML and CSS for building a static yet responsive user interface.
- **Backend**: Python for server-side logic and handling quiz functionalities.

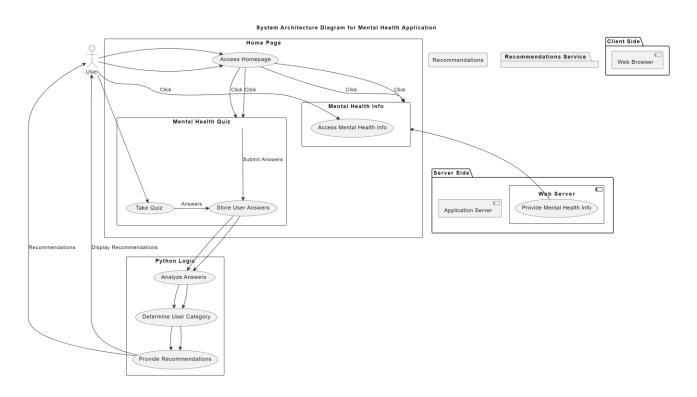
1.3.2 Hardware Requirements

- **Server**: A basic web server with sufficient RAM (4GB or more) and storage (50GB or more) to host the application.
- **Client**: Any device with internet access and a web browser.

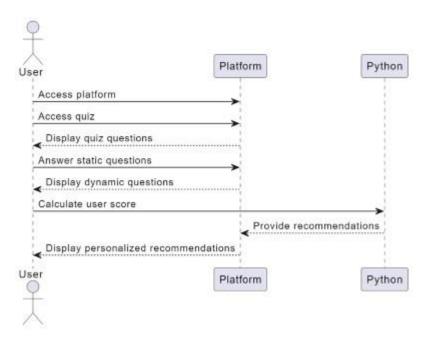
2. DESIGN METHODOLOGY

2.1 System Architecture

Mind Matters utilizes a client-server architecture. The frontend is developed using HTML and CSS to create a user-friendly interface, while the backend is implemented in Python to handle quiz logic and user management. We use python code to calculate marks and give quiz results, ensuring personalized feedback and progress tracking.



2.2 Data flow diagram or flowchart



2.3. Technology description

2.3.1 HTML and CSS

HTML (Hyper Text Markup Language) is used for structuring the web pages, while CSS (Cascading Style Sheets) is used for styling and layout. Together, they create a responsive and visually appealing user interface.

2.3.2 *Python*

Python is used for backend development due to its simplicity and versatility. It handles server-side logic, including quiz processing and user authentication.

3. IMPLEMENTATION AND TESTING

Implementation

The development process follows an agile methodology with iterative cycles of development, testing, and feedback. Key stages include:

- **Designing the user interface**: Creating wireframes and prototypes to map out the layout and flow of the web pages.
- **Developing the quiz functionality**: Crafting quizzes that are engaging and educational, with backend logic to process responses and generate feedback.
- **Integrating the system components**: Ensuring smooth operation between the frontend and backend.
- **Testing**: Conducting unit tests, integration tests, and user acceptance tests to identify and address issues.

3.1 Code snippets

```
@app.route('/')
def home():
return render_template('home.html')
@app.route('/brief')
def brief():
return render_template('brief.html')
@app.route('/quiz', methods=['GET', 'POST'])
def quiz():
if request.method == 'POST':
first_10_answers = {}
for question_id in range(1, 11):
```

```
answer = request.form.get(f'q{question_id}')
if answer:
first_10_answers[question_id] = get_score(answer)
if not first_10_answers:
return redirect(url_for('quiz'))
score = sum(first_10_answers.values())
category = get_category(score)
username = request.form.get('username')
return redirect(url_for('additional_quiz', category=category, username=username))
csrf_token = generate_csrf()
return render template('quiz.html', questions=static questions, csrf token=csrf token)
@app.route('/additional quiz/<category>', methods=['GET', 'POST'])
def additional quiz(category):
questions = additional_questions[category]
additional_answers = {}
total\_score = 0
if request.method == 'POST':
for question_id in range(1, len(questions) + 1):
answer = request.form.get(f'q{question_id}')
if answer:
additional_answers[question_id] = get_score(answer)
if not additional_answers:
return redirect(url_for('additional_quiz', category=category))
total_score = sum(additional_answers.values())
```

```
username = request.args.get('username')
return redirect(url_for('results', total_score=total_score, username=username))
csrf_token = generate_csrf()
return render_template('additional_quiz.html', questions=questions, csrf_token=csrf_token)
@app.route('/results/<int:total_score>')
def results(total_score):
username = request.args.get('username')
symptoms_and_recommendations, recommendations = get_recommendations(total_score)
return render_template('results.html', total_score=total_score, username=username,
symptoms_and_recommendations=symptoms_and_recommendations,
recommendations=recommendations)
def get category(score):
if score < 16:
return 'low'
elif 16 <= score <= 33:
return 'medium'
else:
return 'high'
def get_score(answer):
answer = answer.lower() if answer else "
if answer == 'never':
return 0
elif answer == 'rarely':
return 1
elif answer == 'sometimes':
return 2
```

```
elif answer == 'often':

return 3

elif answer == 'always':

return 4

else:

return 0

def get_recommendations(total_score):

# Placeholder for recommendations logic
```

return "symptoms_and_recommendations", ["recommendation1", "recommendation2"]

3.2 Test cases

Testing

Home Page and Brief Page

Test Case ID	Description	Steps	Expected Result
TC-1.1	Access Home Page	Navigate to `/`	Home page renders without any errors
TC-2.1	Access Brief Page	Navigate to `/brief`	Brief page renders without any errors

Quiz Page and Score Calculation

Test Case ID	Description	Steps	Input (Answers)	Expected Result	
TC- 3.1	Access Quiz Page	Navigate to `/quiz`	N/A	Quiz page renders with static questions and CSRF token	
TC- 3.2	Submit Quiz without Answers	Submit the form on '/quiz' without selecting any answers	None	Redirect back to the quiz page	
TC- 3.3	Submit Quiz with Low Category Score	Submit the form on '/quiz' with low scoring answers	Never (10 answers)	Redirect to additional_quiz with category 'low'	
TC- 3.4	Submit Quiz with Medium Category Score	Submit the form on `/quiz` with medium scoring answers	Sometimes (8 answers), Rarely (2 answers)	Redirect to additional_quiz with category 'medium'	
TC- 3.5	Submit Quiz with High Category Score	Submit the form on '/quiz' with high scoring answers	Often (7 answers), Always (3 answers)	Redirect to additional_quiz with category 'high'	
TC- 3.6	Submit Additional Quiz with Fine Health	Submit the form on `/additional_quiz` with low scoring answers	Never (20 answers)	Redirect to results page with recommendations for fine health conditions	
TC- 3.7	Submit Additional Quiz with Mild Stress	Submit the form on `/additional_quiz` with medium scoring answers	Sometimes (15 answers), Rarely (5 answers)	Redirect to results page with recommendations for mild stress or fatigue	
TC- 3.8	Submit Additional Quiz with Moderate Stress	Submit the form on '/additional_quiz' with medium-high scoring answers	Often (12 answers), Sometimes (8 answers)	Redirect to results page with recommendations for moderate stress or fatigue	
TC- 3.9	Submit Additional Quiz with Noticeable Stress	Submit the form on '/additional_quiz' with high scoring answers	Always (10 answers), Often (10 answers)	Redirect to results page with recommendations for noticeable stress or tiredness	
TC- 3.10	Submit Additional Quiz with Significant Stress	Submit the form on `/additional_quiz` with very high scoring answers	Always (20 answers)	Redirect to results page with recommendations for significant stress and consult a therapist	

Example Inputs and Expected Outputs

Test Case ID	First 10 Answers (Static)	Total Score (First 10)	Category (Additional Questions)	Next 20 Answers (Dynamic)	Total Score (Final)	Final Recommendations
TC- 3.3	Never	0	Low	Never	0	Recommendations for fine health conditions
TC- 3.4	Sometimes, Rarely (8, 2)	18	Medium	Sometimes (15), Rarely (5)	35	Recommendations for mild stress or fatigue
TC- 3.5	Often (7), Always (3)	33	High	Often (12), Sometimes (8)	60	Recommendations for moderate stress or fatigue
TC- 3.6	Rarely (10)	10	Low	Never (20)	10	Recommendations for fine health conditions
TC- 3.7	Often (5), Sometimes (5)	25	Medium	Sometimes (10), Often (10)	55	Recommendations for moderate stress or fatigue
TC- 3.8	Sometimes (6), Often (4)	28	Medium	Often (15), Sometimes (5)	53	Recommendations for moderate stress or fatigue
TC- 3.9	Always (7), Often (3)	37	High	Always (10), Often (10)	77	Recommendations for noticeable stress or tiredness
TC- 3.10	Always (10)	40	High	Always (20)	120	Recommendations for significant stress, consult a therapist

4. CONCLUSION

Mind Matters successfully addresses the need for engaging and accessible mental health education. By combining technology with interactive content, the platform empowers users to take control of their mental health. Future work will focus on expanding the range of quizzes, enhancing personalization features, and integrating additional support resources.

Recommendations

Hi sri, You may experience mild stress or fatigue. Here are some recommendations

- · Regular aerobic exercises like running, cycling, or dancing: Boosts endorphin levels and improves mood.
- Strength training: Enhances physical and mental strength, reducing symptoms of anxiety
 High-intensity interval training (HIIT): Releases stress and increases energy levels.
 Group fitness classes: Provides social interaction and reduces feelings of isolation.

- Tree Pose (Vrksasana): Improves balance and focus.
- Warrior I (Virabhadrasana I): Increases confidence and strength.
 Warrior II (Virabhadrasana II): Enhances concentration and stability.
- . Triangle Pose (Trikonasana): Reduces anxiety and improves overall flexibility
- Bridge Pose (Setu Bandhasana): Alleviates stress and stretches the chest and shoulders.
 Camel Pose (Ustrasana): Opens the heart and relieves tension in the back.

- Seated Forward Bend (Paschimottanasana): Calms the mind and stretches the spine.
 Reclining Bound Angle Pose (Supta Baddha Konasana): Relaxes the body and reduces stress.
- It's recommended to consult a therapist before taking any action as this is just an online quiz and may not be fully accurate.

Back to Home

BIBLIOGRAPHY

- 1. *Flask Documentation*: Official documentation for Flask, providing comprehensive guidance on using the Flask web framework for Python.
 - [Flask Documentation](https://flask.palletsprojects.com/en/2.0.x/)
- 2. *Flask-WTF Documentation*: Documentation for Flask-WTF, an extension for Flask that integrates Flask with WTForms for handling web forms.
 - [Flask-WTF Documentation](https://flask-wtf.readthedocs.io/en/stable/)
- 3. *WTForms Documentation*: Documentation for WTForms, a flexible library for handling web forms in Python.
 - [WTForms Documentation](https://wtforms.readthedocs.io/en/2.3.x/)
- 4. *Python Documentation*: Official documentation for the Python programming language, covering language syntax, libraries, and best practices.
 - [Python Documentation](https://docs.python.org/3/)
- 5. *Programming with Mosh Python and Flask Tutorials*: YouTube playlist by Programming with Mosh offering tutorials on Python and Flask development.
 - [Programming with Mosh Python and Flask Tutorials](insert_link_to_playlist)
- 6. *Real Python Flask Tutorials*: Collection of tutorials and articles on Flask web development by Real Python, covering beginner to advanced topics.
 - [Real Python Flask Tutorials](https://realpython.com/tutorials/flask/)
- 7. *GitHub Flask*: Official GitHub repository for Flask containing source code, documentation, issues, and community contributions.
 - [GitHub Flask](https://github.com/pallets/flask)

CSRF protection using Flask-WTF extension.			
	19		

8. *CSRF Protection with Flask-WTF*: Tutorial or documentation explaining how to implement

APPENDIX

eating disorders.

Brief.html: <!DOCTYPE html> <html> <head> <title>Brief About Mental Health</title> k rel="stylesheet" href="{{ url_for('static', filename='styles.css') }}"> </head> <body> <h1>About Mental Health</h1> Mental health refers to cognitive, emotional, and social well-being. It affects how we think, feel, and act, and it also influences how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood. <h2>Importance of Mental Health</h2> Good mental health is essential for overall well-being and quality of life. It helps individuals cope with the stresses of life, work productively, maintain healthy relationships, and contribute to their communities. <h2>Various Mental Health Issues</h2> Common mental health issues include depression, anxiety disorders, bipolar disorder, schizophrenia, post-traumatic stress disorder (PTSD), obsessive-compulsive disorder (OCD), and

<h2>Triggering Factors</h2>

Several factors can contribute to mental health issues, including genetics, brain chemistry, trauma, life experiences, family history of mental health problems, biological factors, and environmental stressors.

<h2>Verified Analyses</h2>

Studies have shown that early intervention and treatment can improve outcomes for individuals with mental health disorders. Psychotherapy, medication, lifestyle changes, and support from family and friends are effective in managing mental health conditions.

<h2>Suggestions to Maintain Good Mental Health</h2>

Practice self-care activities such as exercise, adequate sleep, and healthy eating.

Seek social support and maintain positive relationships.

Practice stress management techniques such as meditation, mindfulness, and deep
breathing exercises.

Engage in activities that bring joy and fulfillment, such as hobbies and creative
outlets.

Limit alcohol and substance use, as they can exacerbate mental health issues.

Seek professional help if experiencing symptoms of mental health disorders.

```
<h2>Additional Resources</h2>
  For more information on mental health, you can visit the following authorized article
pages:
  <ul>
     <a href="https://www.nimh.nih.gov/health/topics/index.shtml">National Institute of</a>
Mental Health (NIMH)</a>
     <a href="https://www.mayoclinic.org/diseases-conditions/mental-illness/symptoms-">https://www.mayoclinic.org/diseases-conditions/mental-illness/symptoms-</a>
causes/syc-20374968">Mayo Clinic - Mental Illness</a>
     <a href="https://www.psychiatry.org/patients-families/what-is-mental-illness">American</a>
Psychiatric Association - What Is Mental Illness?</a>
  <!-- Watermark Image-->
  <img src="https://youthhq.ca/wp-content/uploads/2021/12/Mind-Matters-Logo.png"</pre>
alt="Watermark" class="watermark">
  <a href="{{ url_for('home') }}">Back to Home</a>
</body>
</html>
Home.html:
<!DOCTYPE html>
<html>
```

```
<head>
  <title>MIND MATTERS</title>
  k rel="stylesheet" href="{{ url_for('static', filename='styles.css') }}">
</head>
<body>
  <h1>MIND MATTERS</h1>
  <h2>Welcome to the Mental Health Awareness Website</h2>
  <nav class="tabs">
    <a href="{{ url_for('brief') }}">Brief</a> |
    <a href="{{ url_for('quiz') }}">Quiz</a>
    <!-- Watermark Image -->
    <img src="https://youthhq.ca/wp-content/uploads/2021/12/Mind-Matters-Logo.png"</pre>
alt="Watermark" class="watermark">
  </nav>
</body>
</html>
Quiz.html:
<!DOCTYPE html>
<html>
<head>
  <title>Mental Health Quiz</title>
```

```
k rel="stylesheet" href="{{ url_for('static', filename='styles.css') }}">
</head>
<body>
  <h1>Mental Health Quiz</h1>
  <form method="post">
    <!-- Add CSRF Token -->
    <input type="hidden" name="csrf_token" value="{{ csrf_token }}">
    <!-- Username Field -->
    <input type="text" name="username" placeholder="Enter your name" required><br>
    <!-- First 10 Questions -->
    {% for question in questions %}
      <label>{{ loop.index }}. {{ question }}</label><br>
      <input type="radio" name="q{{ loop.index }}" value="never"> Never<br>
      <input type="radio" name="q{{ loop.index }}" value="rarely"> Rarely<br>
      <input type="radio" name="q{{ loop.index }}" value="sometimes"> Sometimes<br>
      <input type="radio" name="q{{ loop.index }}" value="often"> Often<br/>br>
      <input type="radio" name="q{{ loop.index }}" value="always"> Always<br>
    {% endfor %}
    <!-- Submit Button -->
    <button type="submit">Submit</button>
```

```
</form>
<!-- Watermark Image-->
  <img src="{{ url_for('static', filename='watermark.jpg') }}" class="watermark" alt="Watermark</pre>
Image">
</body>
</html>
Additional_quiz.html:
<!DOCTYPE html>
<html>
<head>
  <title>Additional Mental Health Quiz</title>
  <link rel="stylesheet" href="{{ url_for('static', filename='styles.css') }}">
</head>
<body>
  <h1>Mental Health Quiz</h1>
  <form method="post">
    <!-- Add CSRF Token -->
    <input type="hidden" name="csrf_token" value="{{ csrf_token }}">
    <!-- Additional Questions -->
    {% for question in questions %}
      <label>{{ loop.index+10 }}. {{ question }}</label><br>
```

```
<input type="radio" name="q{{ loop.index }}" value="never"> Never<br>
      <input type="radio" name="q{{ loop.index }}" value="rarely"> Rarely<br>
      <input type="radio" name="q{{ loop.index }}" value="sometimes"> Sometimes<br/><br/>br>
      <input type="radio" name="q{{ loop.index }}" value="often"> Often<br/>br>
      <input type="radio" name="q{{ loop.index }}" value="always"> Always<br>
    {% endfor %}
    <!-- Submit Button -->
    <button type="submit">Submit</button>
  </form>
<!-- Watermark Image-->
  <img src="https://youthhq.ca/wp-content/uploads/2021/12/Mind-Matters-Logo.png"</pre>
alt="Watermark" class="watermark">
</body>
</html>
Result.html:
<!DOCTYPE html>
<html>
<head>
  <title>Quiz Results</title>
  k rel="stylesheet" href="{{ url_for('static', filename='styles.css') }}">
</head>
```

```
<body>
  <h1>Recommendations</h1>
  <!-- Display the greeting message with the username -->
  Hi {{ username }}, {{ symptoms_and_recommendations }}
  ul>
    {% for recommendation in recommendations %}
    {| recommendation | }
    {% endfor %}
  <a href="{{ url_for('home') }}">Back to Home</a>
  <!-- Watermark Image-->
  <img src="https://youthhq.ca/wp-content/uploads/2021/12/Mind-Matters-Logo.png"</pre>
alt="Watermark" class="watermark">
</body>
</html>
Styles.css:
/* Reset default list styles */
nav {
  margin: 20px 0;
/* Style for tabs */
```

}

```
nav a {
  display: inline-block;
  padding: 10px 20px;
  background-color: #48C9B0; /* Greenish-blue color for tabs */
  color: #fff; /* White text color for tabs */
  text-decoration: none;
  border: 1px solid #48C9B0; /* Border color matches background */
  border-bottom: none;
  border-radius: 5px 5px 0 0; /* Rounded corners for top */
  margin-right: 5px; /* Adjust spacing between tabs */
/* Style for active tab */
nav a.active {
  background-color: #3498DB; /* Blue color for active tab */
  border-color: #3498DB; /* Border color matches background */
/* Hover effect */
nav a:hover {
```

}

}

```
background-color: #5DADE2; /* Lighter blue color on hover */
  border-color: #5DADE2; /* Border color matches background */
}
/* Adjust last tab border radius */
nav a:last-child {
  margin-right: 0; /* Remove margin from the last tab */
}
/* Body Styles */
body {
  font-family: Arial, sans-serif;
  background-color: #f4f4f4; /* Light background color */
  padding: 20px; /* Add padding to create space around content */
  position: relative; /* Make the body position relative */
}
/* Main Heading Styles */
/* Main Heading Styles */
```

```
font-weight: bold; /* Make main heading bold */
  color: #3AAFA9; /* Soft green color for main heading */
  background-color: #EAEDED; /* Light grayish-blue background color for the bar */
  padding: 10px 20px; /* Add padding to heading */
  border-radius: 5px; /* Rounded corners for heading */
  margin-top: 0; /* Remove default margin from heading */
}
/* Question Heading Styles */
label {
  display: block; /* Display each question on a new line */
  font-weight: bold; /* Make question headings bold */
  margin-bottom: 10px; /* Add margin to create space between questions */
}
/* Differentiate each question with different colors */
label:nth-of-type(odd) {
  color: #16A085; /* Green color for odd-numbered questions */
```

h1 {

```
label:nth-of-type(even) {
  color: #3498DB; /* Blue color for even-numbered questions */
}
/* Container Styles */
.container {
  padding: 20px; /* Add padding to container */
  background-color: #ffffff; /* White background color for container */
  border-radius: 8px; /* Add border radius for rounded corners */
  box-shadow: 0 0 10px rgba(0, 0, 0, 0.1); /* Add box shadow for depth */
}
/* Submit Button Styles */
button[type="submit"] {
  background-color: #16A085; /* Green color for submit button */
  color: #ffffff; /* White text color for submit button */
  border: none; /* Remove border */
  padding: 10px 20px; /* Add padding to button */
```

}

```
cursor: pointer; /* Change cursor to pointer on hover */
  border-radius: 4px; /* Add border radius for rounded corners */
}
/* Submit Button Hover Styles */
button[type="submit"]:hover {
  background-color: #138D75; /* Darker green color on hover */
}
/* Watermark Styles */
.watermark {
  position: fixed; /* Make the watermark position fixed */
  top: 50%; /* Position the watermark at the vertical center */
  left: 50%; /* Position the watermark at the horizontal center */
  transform: translate(-50%, -50%); /* Center the watermark */
  opacity: 0.1; /* Adjust the opacity of the watermark */
  z-index: -1; /* Set z-index to ensure the watermark is behind other content */
}
App.py:
from flask_wtf.csrf import generate_csrf
```

```
from flask import Flask, render_template, request, redirect, url_for
app = Flask(\underline{\quad name}\underline{\quad})
# Set the secret key
app.config['SECRET_KEY'] = 'RTPF_m!ndm@tters'
# Initialize CSRF protection
csrf = CSRFProtect(app)
# Static first 10 questions
static_questions = [
  "How often do you feel stressed?",
  "How often do you feel anxious?",
  "How often do you have trouble sleeping?",
  "How often do you feel down or depressed?",
  "How often do you feel overwhelmed?",
  "How often do you feel irritable?",
  "How often do you experience changes in appetite?",
  "How often do you feel fatigued?",
```

from flask_wtf.csrf import CSRFProtect

```
"How often do you have trouble concentrating?",
  "How often do you feel hopeless?"
]
# Additional questions to be shown based on the score of the first 10 questions
additional_questions = {
  'low': [
     "How often do you struggle to relax or unwind?",
     "How often do you feel unsupported by those around you?",
     "How often do you avoid physical exercise?",
     "How often do you feel unable to enjoy your hobbies or activities?",
     "How often do you neglect self-care activities?",
     "How often do you feel your work-life balance is unhealthy?",
     "How often do you feel isolated from social activities or loved ones?",
     "How often do you feel dissatisfied with your overall quality of life?",
     "How often do you struggle to practice mindfulness or stay present?",
     "How often do you avoid seeking professional help or counseling when needed?",
     "How often do you feel dissatisfied with your level of personal growth and development?",
     "How often do you struggle to handle setbacks or challenges in your life?",
     "How often do you feel a lack of purpose or direction in your life?",
```

```
"How often do you struggle to maintain a positive outlook on life?",
  "How often do you feel unable to set boundaries and assert yourself?",
  "How often do you feel disconnected from your community or a sense of belonging?",
  "How often do you struggle to cope with negative emotions such as anger or sadness?",
  "How often do you feel unable to express your thoughts and feelings openly with others?",
  "How often do you fail to celebrate your accomplishments and successes?",
  "How often do you neglect activities that nourish your mind, body, and spirit?"
],
'medium': [
  "How often do you notice negative changes in your mood or behavior?",
  "How often do you struggle to cope with major life changes or challenges?",
  "How often do you face unresolved conflicts in your personal or professional life?",
  "How often do you feel a lack of purpose or fulfillment in your daily activities?",
  "How often do you struggle to manage your workload and responsibilities?",
  "How often do past traumatic experiences affect you?",
  "How often do you engage in negative thoughts or self-criticism?",
  "How often do you experience physical symptoms related to stress or anxiety?",
  "How often do you fail to prioritize your mental health in your daily routine?",
  "How often do you rely on unhealthy habits or coping mechanisms?",
  "How often do you struggle to maintain boundaries in your relationships?",
```

```
"How often do you feel stuck or stagnant in areas of your life?",
  "How often do you neglect your creativity and imagination?",
  "How often do you experience changes in your sleep patterns?",
  "How often do you struggle to cultivate balance and harmony in your life?",
  "How often do you feel you lack goals or aspirations to work towards?",
  "How often do you struggle to cope with uncertainty or ambiguity?",
  "How often do you feel disconnected from something greater than yourself?",
  "How often do you struggle to cultivate resilience in the face of adversity?",
  "How often do you feel there are aspects of your life that you want to improve or change?"
],
'high': [
  "How often do you experience traumatic events or loss?",
  "How often do you struggle to cope with overwhelming emotions or situations?",
  "How often do you deal with persistent negative thought patterns?",
  "How often do you struggle to manage your time and energy effectively?",
  "How often do you notice changes in your appetite or eating habits?",
  "How often do you struggle to maintain optimism and hope for the future?",
  "How often do you experience recurring nightmares or sleep disturbances?",
  "How often do you handle conflicts or disagreements in your relationships poorly?",
  "How often do you experience symptoms of burnout or emotional exhaustion?",
```

"How often do you struggle to practice self-compassion and forgiveness towards yourself?",

"How often do you find it difficult to identify and challenge irrational beliefs or cognitive distortions?",

"How often do you struggle to cultivate a sense of identity and self-worth during difficult times?",

"How often do you lack a support network or community you can turn to for help?",

"How often do you struggle with existential questions or concerns about the meaning of life?",

"How often do you experience changes in your relationships or social connections?",

"How often do you find it difficult to navigate transitions or changes in your life circumstances?",

"How often do you deal with unresolved conflicts or tensions within yourself or with others?",

"How often do you struggle to cultivate a sense of acceptance and peace with things you cannot change?",

"How often do you neglect activities that nourish your mind, body, and spirit?",

"How often do you struggle to find meaning and purpose in challenging experiences or adversity?"

```
}
@app.route('/')
def home():
```

return render_template('home.html')

]

```
@app.route('/brief')
def brief():
  return render_template('brief.html')
@app.route('/quiz', methods=['GET', 'POST'])
def quiz():
  if request.method == 'POST':
    first_10_answers = {}
    for question_id in range(1, 11):
       answer = request.form.get(f'q{question_id}')
       if answer:
         first_10_answers[question_id] = get_score(answer)
    # Ensure that first_10_answers is not empty
    if not first_10_answers:
       # Handle case where no answers were provided
       return redirect(url_for('quiz'))
    # Calculate the total score
```

```
score = sum(first_10_answers.values())
    category = get_category(score)
    # Get the username from the form
    username = request.form.get('username')
    # Redirect to the additional quiz with the username included in the query string
    return redirect(url_for('additional_quiz', category=category, username=username))
  # Generate CSRF token for GET request
  csrf_token = generate_csrf()
  return render_template('quiz.html', questions=static_questions, csrf_token=csrf_token)
@app.route('/additional_quiz/<category>', methods=['GET', 'POST'])
def additional_quiz(category):
  questions = additional_questions[category]
  additional_answers = {}
  total_score = 0 # Initialize total_score with a default value
  if request.method == 'POST':
```

```
for question_id in range(1, len(questions) + 1):
       answer = request.form.get(f'q{question_id}')
       if answer:
         additional_answers[question_id] = get_score(answer)
    # Ensure that additional_answers is not empty
    if not additional_answers:
       return redirect(url_for('additional_quiz', category=category))
    total_score = sum(additional_answers.values())
    username = request.args.get('username') # Get the username from the query string
    return redirect(url_for('results', total_score=total_score, username=username))
  csrf_token = generate_csrf()
  return render_template('additional_quiz.html', questions=questions, csrf_token=csrf_token)
@app.route('/results/<int:total_score>')
def results(total_score):
  username = request.args.get('username') # Get the username from the query string
  symptoms_and_recommendations, recommendations = get_recommendations(total_score)
```

```
recommendations=recommendations)
def get_category(score):
  if score < 16:
     return 'low'
  elif 16 <= score <= 33:
     return 'medium'
  else:
     return 'high'
def get_score(answer):
  answer = answer.lower() if answer else " # Convert answer to lowercase if it exists
  if answer == 'never':
     return 0
  elif answer == 'rarely':
     return 1
  elif answer == 'sometimes':
     return 2
  elif answer == 'often':
```

return render_template('results.html', total_score=total_score, username=username,

symptoms_and_recommendations=symptoms_and_recommendations,

```
return 3
  elif answer == 'always':
    return 4
  else:
    return 0 # Return 0 if answer is not recognized
def calculate_total_score(answers):
  # Placeholder for calculating total score based on all answers
  total_score = sum(get_score(answer) for answer in answers.values())
  return total_score
def get_recommendations(total_score):
    recommendations = []
    symptoms_and_recommendations = ""
    if total_score < 30:
       recommendations = [
         "practicing few yoga asanas and making yourself active might be helpful for you.",
         "Walking or light jogging: Promotes relaxation and boosts mood.",
         "Swimming: Helps to reduce stress and improve overall well-being.",
```

```
"Stretching exercises: Relieves muscle tension and promotes flexibility.",
         "Tai Chi: Combines gentle movements and deep breathing for relaxation.",
         "Child's Pose (Balasana): Calms the mind and releases tension in the back.",
         "Cat-Cow Stretch (Marjaryasana-Bitilasana): Improves flexibility and reduces stress.",
         "Legs-Up-the-Wall Pose (Viparita Karani): Relieves stress and promotes relaxation.",
         "Savasana (Corpse Pose): Helps to relax the body and quiet the mind."
       ]
       symptoms and recommendations = "Your health seems fine but You might feel
occasionally tired or stressed. Here are some recommendations:"
    elif total_score < 50:
       recommendations = [
         "Regular aerobic exercises like running, cycling, or dancing: Boosts endorphin levels and
improves mood.",
         "Strength training: Enhances physical and mental strength, reducing symptoms of
anxiety.",
         "High-intensity interval training (HIIT): Releases stress and increases energy levels.",
         "Group fitness classes: Provides social interaction and reduces feelings of isolation.",
         "Tree Pose (Vrksasana): Improves balance and focus.",
         "Warrior I (Virabhadrasana I): Increases confidence and strength.",
         "Warrior II (Virabhadrasana II): Enhances concentration and stability.",
```

```
"Triangle Pose (Trikonasana): Reduces anxiety and improves overall flexibility.",
         "Bridge Pose (Setu Bandhasana): Alleviates stress and stretches the chest and shoulders.",
         "Camel Pose (Ustrasana): Opens the heart and relieves tension in the back.",
         "Seated Forward Bend (Paschimottanasana): Calms the mind and stretches the spine.",
         "Reclining Bound Angle Pose (Supta Baddha Konasana): Relaxes the body and reduces
stress."
       ]
       symptoms_and_recommendations = "You may experience mild stress or fatigue. Here are
some recommendations:"
    elif total_score < 70:
       recommendations = [
         "Mindfulness meditation: Reduces stress and promotes emotional well-being.",
         "Deep breathing exercises: Activates the relaxation response and reduces anxiety.",
         "Progressive muscle relaxation: Eases physical tension and promotes relaxation.",
         "Yoga Nidra: Induces deep relaxation and improves sleep quality.",
         "Visualization or guided imagery: Reduces stress and enhances mental clarity.",
         "Journaling: Provides an outlet for emotions and helps process thoughts.",
         "Art therapy: Encourages self-expression and emotional healing.",
         "Listening to calming music: Soothes the mind and reduces stress levels.",
         "Warm baths with essential oils: Relaxes the body and calms the mind.",
```

```
"Aromatherapy: Utilizes scents like lavender or chamomile to reduce anxiety.",
```

"Practicing gratitude: Shifts focus to positive aspects of life and improves mood.",

"Connecting with a supportive friend or family member: Provides emotional support."

]

symptoms_and_recommendations = "You could be feeling moderate stress or fatigue. Here are some recommendations:"

```
elif total_score < 110:
```

```
recommendations = [
```

"Seeking professional counseling or therapy: Offers guidance and support for managing mental health.",

"Engaging in hobbies or activities you enjoy: Promotes a sense of accomplishment and joy.",

"Setting realistic goals: Helps to manage expectations and reduce stress.",

"Time management techniques: Improves productivity and reduces feelings of overwhelm.",

"Practicing self-compassion: Encourages kindness towards oneself and reduces self-criticism.",

"Limiting caffeine and sugar intake: Stabilizes mood and energy levels.",

"Spending time in nature: Promotes relaxation and mental clarity.",

"Connecting with support groups or online communities: Provides a sense of belonging and understanding."

]

symptoms_and_recommendations = "You might be experiencing noticeable stress or tiredness. Here are some recommendations:"

else:

recommendations = [

" Consider making some healthy lifestyle changes.",

"Immediate professional help is recommended to manage your mental health.",

"Mindfulness-based stress reduction (MBSR): Integrates mindfulness to reduce stress.",

"Cognitive-behavioral therapy (CBT): Helps to identify and change negative thought patterns.",

"Regular physical activity: Reduces stress hormones and promotes well-being.",

"Healthy diet: Supports overall health and can improve mood and energy levels.",

"Adequate sleep: Essential for physical and mental recovery.",

"Social support: Engaging with friends and family can provide emotional support.",

"Stress management techniques: Helps to manage and reduce stress levels.",

"Limiting screen time: Reduces exposure to negative news and social media comparisons."]

symptoms_and_recommendations = "You might be experiencing significant stress or tiredness. Here are some recommendations:"

Concatenate the recommendation to consult a therapist at the end

therapist_recommendation = "It's recommended to consult a therapist before taking any action as this is just an online quiz and may not be fully accurate."

recommendations.append(therapist_recommendation)

return symptoms_and_recommendations, recommendations

if __name__ == '__main__':

app.run(debug=True)