**Necessary instructions to run the application.**

Step 1 : copy and paste the app.py code in the notepad & be careful when saving select all files below the file name , in the folder (room\_allocation\_app)

Step 2 : paste the codes like mainpage.html and result.html in the separate folder called ( templates) under the ( room\_allocation\_app)

You should save the Python code I provided in a file with a .py extension. Here are the steps to do that:

1. Open a text editor like Notepad (on Windows) or TextEdit (on Mac).
2. Copy the entire Python code I provided and paste it into the text editor.
3. Save the file with a name like app.py. Make sure to choose "All Files" as the file type (not "Text Document") and explicitly add the .py extension to the filename.
4. Save this file in a new folder that you create for this project. For example, you might create a folder called "room\_allocation\_app" on your desktop or in your documents folder.
5. In the same folder where you saved app.py, create another folder called templates.
6. Inside the templates folder, create two new files:
   * One called mainpage.html with the HTML code I provided for the index page
   * Another called result.html with the HTML code I provided for the result page

Your folder structure should look like this :

room\_allocation\_app/

│

├── app.py

│

└── templates/

├── index.html

└── result.html

Remember, you need to have Python and Flask installed on your computer for this to work. If you haven't installed Flask yet, you can do so by running pip install flask in your command prompt or terminal.

 Ensure Python is installed:

* Download and install Python from the official website (<https://www.python.org/downloads/>) if you haven't already.
* During installation, make sure to check the box that says "Add Python to PATH".

 If Python is already installed, you may need to add it to your PATH manually:

* Find the location where Python is installed (e.g., C:\Python39)
* Add this directory and its Scripts subdirectory to your system's PATH environment variable.

 After installation or PATH update, restart your command prompt.

 Try running the command again:

pip install flask (or) python -m pip install flask

If none of these solutions work, you may need to troubleshoot your Python installation or consider reinstalling Python, ensuring that you select the option to add Python to PATH during the installation process  
  
  
**once the flask is installed in your system**

Great that Flask is installed on your system. To run your Python Flask application, follow these steps:

1. Open a command prompt or terminal.

2. Navigate to the directory where your app.py file is located. You can do this using the 'cd' command. For example:

```

cd C:\path\to\your\project\folder

```

Replace "C:\path\to\your\project\folder" with the actual path to the folder containing your app.py file.

3. Once you're in the correct directory, run the following command:

```

python app.py

```

4. If everything is set up correctly, you should see output similar to this:

```

\* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)

\* Restarting with stat

\* Debugger is active!

\* Debugger PIN: 123-456-789

```

5. Open a web browser and go to the address shown in the output (typically http://127.0.0.1:5000/ or http://localhost:5000/).

If you encounter any errors, make sure:

- You're in the correct directory

- The app.py file exists in that directory

- Flask is properly installed

This URL is incorrect and causing the 404 Not Found error. The "%20or%20" part is likely causing issues.

To fix this:

1. In your browser, simply enter: <http://127.0.0.1:5000> or <http://localhost:5000>
2. Make sure there are no extra characters or spaces in the URL.
3. If you're still seeing a 404 error after entering the correct URL, there might be an issue with your Flask routes. Double-check your app.py file to ensure you have a route defined for the root URL ("/"). It should look something like this:

@app.route('/')

def index():

return render\_template('mainpage.html')

Room Allocation System interface is now working correctly. To show the output for allocating rooms after the user uploads the CSV files and clicks the "Allocate Rooms" button, you'll need to:

1. Process the uploaded CSV files
2. Run your room allocation algorithm
3. Display the results

I'll provide you with sample CSV files for both the group information and the hostel information. You can use these to test your Room Allocation System.

1. Group Information CSV (group\_info.csv):

Group ID,Members,Gender

101,3,Boys

102,4,Girls

103,2,Boys

104,5,Girls

105,8,5 Boys & 3 Girls

106,6,Girls

107,4,Boys

108,3,Girls

109,7,4 Boys & 3 Girls

110,2,Boys

2) Hostel Information CSV (hostel\_info.csv):

Hostel Name,Room Number,Capacity,Gender

Boys Hostel A,101,3,Boys

Boys Hostel A,102,4,Boys

Boys Hostel A,103,2,Boys

Boys Hostel B,201,5,Boys

Boys Hostel B,202,4,Boys

Girls Hostel A,301,3,Girls

Girls Hostel A,302,4,Girls

Girls Hostel B,401,5,Girls

Girls Hostel B,402,6,Girls

Girls Hostel B,403,2,Girls

To use these CSV files:

1. Copy each CSV content into a separate text file.
2. Save the files with a .csv extension (e.g., group\_info.csv and hostel\_info.csv).
3. Make sure to save them in a location where you can easily find them when uploading through your web interface.

When you run your Flask application:

1. Open the web interface in your browser (<http://127.0.0.1:5000> or <http://localhost:5000>).
2. Use the "Choose File" buttons to select and upload these CSV files.
3. Click the "Allocate Rooms" button.

The system should process these files and display the room allocation results based on your algorithm.

Here's a step-by-step guide to create the CSV files:

1. Open Notepad (or any plain text editor).
2. Copy the content I provided for the Group Information CSV and paste it into a new Notepad document.
3. Save this file:
   * Click "File" > "Save As"
   * Choose a location where you can easily find the file later
   * Set the "Save as type" to "All Files (.)"
   * Name the file "group\_info.csv" (including the .csv extension)
   * Click "Save"
4. Repeat the process for the Hostel Information CSV:
   * Open a new Notepad document
   * Copy and paste the Hostel Information CSV content
   * Save it as "hostel\_info.csv" following the same steps as above

Make sure to save both files with the .csv extension, not .txt. The "All Files (.)" option when saving allows you to specify the .csv extension explicitly.

After creating these files, you'll be able to upload them through your web interface when testing your Room Allocation System.

Remember, these CSV files should be saved separately from your Python code and HTML templates. They are meant to be uploaded through the web interface you've created