Hotel Reservation System Documentation

1. **Introduction**

This documentation guides setting up a Hotel Reservation System using Flask as the backend and Angular as the front-end. The system includes modules for managing hotels, customers, branches, invoices, and room allocations.

1. **Backend (Flask)**

* Setup

Make sure you have Python installed. You can download it from the Python Official Website.

Create a virtual environment:

python -m venv venv

**Activate the virtual environment:**

Windows:

*.\venv\Scripts\activate*

Linux/Mac:

*Source venv/bin/activate*

**Install required packages:**

*pip install -r requirements.txt*

* Database Configuration

**Open app.py and configure the database URL.**  
app.config['SQLALCHEMY\_DATABASE\_URI'] = 'your\_database\_url\_here'

Models

Define models.  
Define models in models.py for hotels, customers, branches, invoices, and room allocations.

* API Endpoints

Implement API endpoints in app.py for CRUD operations on hotels, customers, branches, invoices, and room allocations.

* CORS Configuration

Using the flask-cors extension to allow cross-origin resource sharing (CORS). Import and initialize CORS in app.py.

from flask\_cors import CORS

CORS(app)

1. **Frontend (Angular)**

Setup Name (frontend)

Make sure you have Node.js and npm installed. You can download them from Node.js Official Website.

* Install Angular CLI globally:

npm install -g @angular/cli

* Create a new Angular project:

ng new hotel-reservation-system

* Navigate to the project directory:

cd hotel-reservation-system

* Install required dependencies:

npm install --save @angular/material @angular/flex-layout

1. **Components**

Createing the following components and sub-components using Angular CLI:

* navigation
* hotel and hotel-form
* customer and customer-form
* branch and branch-form
* invoice and invoice form
* room and room-allocation

Images from the program

