

## Room Allocation System - User Guide

### Overview

The Room Allocation System is a web-based tool that helps manage group accommodations by automating the room assignment process. It ensures group members with the same ID stay together, comply with hostel capacities, and adhere to gender-specific accommodations.

### Features

- **Upload Group Information:** Upload a CSV file with details about groups, including group ID, number of members, and gender.
- **Upload Hostel Information:** Upload a CSV file with details about hostel rooms, including hostel name, room number, capacity, and gender accommodation.
- **Room Allocation:** Automatically allocates rooms based on the provided data.
- **Display Results:** Shows the allocated rooms on the screen.
- **Download Details:** Provides a downloadable CSV file with allocation details.

### How to Use

1. **Open the Application**
2. **Upload Files:** Click "Choose File" to select and upload the Group Information CSV file and the Hostel Information CSV file.
3. **Submit Files:** Click the "Upload Files" button to process the files.
4. **View Results:** The allocated rooms will be displayed, and a downloadable CSV file will be available.