

<b>Project Scope</b>	
<b>Project Name</b>	<b>Hotel Management System</b>
<b>Project Developers</b>	<b>Ruth Okbaghebriel &amp; Milkias Haile</b>
<b>Submission Date</b>	<b>10/16/2022</b>
<b>Goal</b>	<p>A hotel is a hive of operations that includes the front desk, booking and reservations, finance, HR, inventory, material management, quality management, security, energy management, housekeeping, and others. All these operations occur at the same time, making manual management impossible. The goal of this hotel management system that we are developing is to automate various routine tasks.</p> <p>The Hotel Management project provides room booking, bill generation, staff management, and other necessary hotel management features. The system allows the admin to post available rooms in the system. Customers can search, view, and book rooms online. Admin can either approve or disapprove the customer's booking request and allow check-in and check-outs as needed.</p> <p>The system is hence helpful for both customers and managers to portably manage hotel activities.</p>
<b>Requirements</b>	<p><b>Functional Requirements</b></p> <p>Booking / Reservation:</p> <ol style="list-style-type: none"> <li>1. The system should support booking different room types like standard, deluxe, executive, etc.</li> <li>2. Guests should be able to search the room inventory and book any available room.</li> <li>3. The system should be able to retrieve information, such as who booked a particular room or what rooms were booked by a specific customer.</li> <li>4. The system should allow customers to cancel their booking - and provide them with a full refund if the cancelation occurs before 24 hours of the check-in date.</li> <li>5. The system should be able to send notifications whenever the booking is nearing the check-in or check-out date.</li> </ol>

	<ol style="list-style-type: none"> <li>The system should maintain a room housekeeping log to keep track of all housekeeping tasks.</li> <li>Any customer should be able to add room services and food items.</li> <li>Customers can ask for different amenities.</li> <li>Customers should be able to pay their bills through credit card, check, or cash.</li> </ol>
<b>Scope Description</b>	At this stage, we will assume that there is no existing system, and we are developing a new one designed for all types of users with highly flexible and configurable products.
<b>Project Deliverables</b>	<ul style="list-style-type: none"> <li>A rough sketch of the UI.</li> <li>Architecture Diagram showing major systems</li> <li>Class Diagram for major classes in the system.</li> <li>Sequence diagram for 1-3 of the use cases.</li> <li>Python application using the 6+ major classes.</li> </ul>
<b>Constraints</b>	<p>Time – Building a fully functioning hotel management system in a few weeks is not an easy task.</p> <p>Experience – This project is a good learning curve and with the education, experience, and time we have our focus on this project is to develop a functioning application that enables customers to make and modify room booking/reservations.</p>

## How will you accomplish the necessary requirements for week 8?

This program is a hotel management system. It is OOP based project. A hotel can be defined with any number of rooms of 3 different suites: Standard, Deluxe, and Executive (varying prices). The features are:

- Any number of customers can be added and stored in a database. Each customer has a unique ID which is used to create/modify/cancel a booking.
- Each room has a calendar that keeps track of bookings. The calendar length is customizable - i.e., the booking date range can be up to the user
- Reservations can be canceled or modified. Refunds are also provided.
- Each customer has an Invoice that prints the bill at the end and is updated if the reservation is canceled or modified.
- The program shows the user which rooms are available on the selected dates, along with the range of booking dates possible.