Deliverable 3:

Author: Cole

ID UC View Bill

Scope Hotel Reservation System

Level User goal

Stakeholder and interests

Customer

- person that is viewing their bill

Clerk

- Person responsible for generating bill

Admin

- Person responsible for resetting user password

Precondition: Guest has valid log-in credentials

Postcondition: Guest views their bill

Main Success scenario:

1. Customer wants to view the bill for their stay
2. Customer logs in to their account
3. Customer will click the "view bill" button
4. The bill will be displayed to the customer

Alternate paths:

a.* anytime the system does not respond

1. Guest will contact an admin
2. Admin will help the guest restart their application

2.a If the user is unable to log into their account

1. Guest will contact an admin
2. Admin will reset the users password

3.a if the "view bill" button is unresponsive

1. Guest will contact a clerk
2. Clerk will manually generate and send the guest the bill
3. Clerk will contact an admin about the bug

4.a If the bill has not been generated

1. Guest will contact a clerk
2. The clerk will generate the bill

4.b if guest's stay is being billed to a corporate account
1. Instead of the bill, a message stating that the guest's corporation is responsible for the bill will be shown

Author: Chase
Casual: UC Create Reservation

Main success scenario:

A Guest needs to make a reservation. They will log in to the system and pick their room theme, quality level, number of beds, smoking status, and trip dates from available rooms which are verified by the system. If not already within the system, the guest will fill in important personal information such as: name, address, credit card number, and date of expiration. The system will mark the room as booked for the specified dates and will send a confirmation email/notification to the guest.

Alternative scenario:

A Guest needs to make a reservation but is unable to log in to the system. The guest will call a clerk. The clerk will help the guest create a reservation. The clerk will connect the guest to an admin who can help them reset their password. Once reset the user can log in to the system and proceed as specified by the main success scenario.

Alternate scenario:

A guest needs to make a reservation but the system is down. The guest will call the hotel and they will be connected to a clerk. The clerk will manually create a reservation for the guest. In the reservation, the clerk will include a note on the reservation with the guests name and address as well as a message to collect payment information when the guest checks-in.

Author: Icko
ID UC Modify Reservation
Scope Hotel Reservation System
Level User goal
Stakeholder and interests

Customer

- Person that wants to modify their reservation

Clerk

- Person who does the modification of reservations

Precondition: Guest has a reservation

Postcondition: Guest's reservation details are updated

Main Success scenario:

1. A customer needs to modify their reservation
2. Customer logs into their account
3. Customer clicks "modify reservation" button
4. Customer selects an available smoking room
5. Customer modifies reservation to new room

Alternate paths:

a.* anytime the system does not respond

1. Guest will contact an admin
2. Admin will help the guest restart their application

2.a If the user is unable to log into their account

1. Guest will contact an admin
2. Admin will reset the users password

3.a If the guest tries to modify a reservation within 24 hours of check in

1. The reservation will not be able to be changed
2. Guest will contact a clerk
3. Clerk will modify reservation if rooms are available

3.b If the "modify reservation" button is unresponsive

1. Guest will contact a clerk
2. Clerk will modify reservation
3. Clerk will contact an admin about the bug

4.a If the room selected will be occupied during the reservation time

1. The room will not be shown as available for a room change with the given reservation.

Author: Afraz

Causal: UC modify room information

Main success scenario:

A clerk needs to modify the information of a room. The clerk logs in to their account. The clerk searches for the specific room they are looking to modify. The clerk clicked on the "edit room info" button which is unique to them. The clerk can then edit all fields for the specified room. The clerk then clicks "save" which saves their changes.

Alternate scenario:

The clerk needs to modify the information of a room so, the clerk attempts to log in. The clerk's login information is not working. The clerk contacts an admin who resets the clerk's password. The admin verifies that the clerk can now log in. Next, the clerk continues as they would in the main success scenario.

Alternate scenario:

The clerk needs to modify the information of a room. The clerk does not yet have an account. The clerk contacts an admin who creates their account. The admin gives the clerk the account information. The clerk logs in with the account credentials given by the admin and changes the default password to a password of their choosing. Next, the clerk continues as they would in the main success scenario.

Author: Siri

Causal: UC shop for items

Main success scenario:

A guest wants to shop for items. They log in to the system. They go to the store and browse the selection through the system. They add any items they wish to purchase to their cart. After viewing the items they plan to buy they check out. At the check out screen the user pays immediately with a credit card. Their purchase details are recorded and they are charged. Finally, they receive a confirmation message and email.

Alternate scenario:

A guest wants to shop for items. They log in to the system. They go to the store and browse the selection through the system. They add any items they wish to

purchase to their cart. After viewing the items they plan to buy they check out. At the check out screen the user does not pay immediately. They instead choose to add it to their tab which is included in their final bill for the stay. The shopping cart details are recorded.

Alternate scenario:

A guest wants to shop for items. They log in to the system. They go to the store and browse the selection through the system. They add any items they wish to purchase to their cart. After viewing the items they decide to wait to purchase the items. The user exits the shop. The system provides the user a message that their cart will be discarded at the time that their stay concludes.

Author: Brendon

Causal: UC make admin account
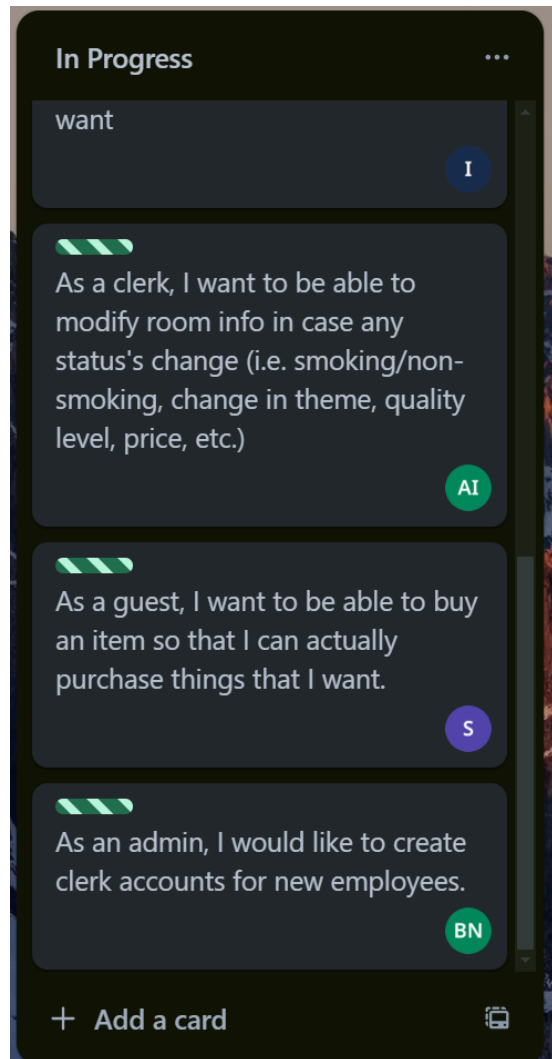
Main success scenario:

The admin wants to make a new clerk account. They log in to the system and make an account for the clerk with a default username and password. They give the account information to the clerk. The clerk logs in to the system.

Alternate scenario:

The admin wants to make a new clerk account. They log in to the system and make an account for the clerk with a default username and password. They give the account information to the clerk. The clerk logs in to the system. The clerk has trouble remembering their account information, so they change their password to something more memorable.

Alternate scenario:

The admin wants to make a new clerk account. They log in to the system and make an account for the clerk with a default username and password. The username the admin chose has already been assigned to another clerk account, so the system provides the user a message that the username is taken, and the account is not created.

In Progress   ...

want

I

As a clerk, I want to be able to modify room info in case any status's change (i.e. smoking/non-smoking, change in theme, quality level, price, etc.)

AI

As a guest, I want to be able to buy an item so that I can actually purchase things that I want.

S

As an admin, I would like to create clerk accounts for new employees.

BN

+ Add a card

In Progress   ...

Project Vision

👁   ☐ Feb 4   ≡   ✷

As a guest, I want to view my bill so that I know how much I owe.

CF

As a guest, I want to be able to create a reservation so that I can reserve a room that I would like to stay in on a specified date(s).

👁   ✷

As a guest, I want to be able to modify a reservation so that I can make changes to my reservation if I want

I

The Mojotel Dojotel Holicasa Inn Vision (Small Project)

Version <0.2>

Revision History

Date	Version	Description	Author
1/26/2024	0.1	Initial Revision	Chase Crayne
2/2	0.2	Content addition	Cole Flenniken

Table of Contents

Vision (Small Project)

1.   Introduction

The purpose of this document is to summarize the high-level needs and features of the G.R.O.U.P. F.I.V.E. HoteleCommerce system. The primary focus is the capabilities required by the stakeholders and target-users, and detailing *why* the needs exist. Details on how the HoteleCommerce system fulfills these needs are described in the use-cases and supplementary specifications.

1.1   References

- Cloudbeds (https://www.cloudbeds.com/)
- Little Hotelier (https://www.littlehotelier.com)
- RoomRaccoon (https://roomraccoon.com)
- Group Project - Overview (Canvas), Professor Quevedo Caballero

2.   Positioning

2.1   Problem Statement

The problem of	**TRIVAGO**
affects	the Mojotel Dojotel Holicasa Inn Project Owners
the impact of which is	the successful operation of the Holicasa Inn and consequent production of revenue.
a successful solution would be	beneficial in terms of cost, efficiency, and guest experience.

2.2   Product Position Statement

For	**TRIVAGO**
Who	needs a venue management solution
The HoteleCommerce Suite	is a webapp software suite
That	unifies the use and management of both Hotel and Shop operations
Unlike	competitor software that doesn't manage shop operations
Our product	seamlessly connects the shopping and hotel management experiences

3.   Stakeholder and User Descriptions

3.1   Stakeholder Summary

Name	Description	Responsibilities
Prof. Caballero ("Hotel Owner")	Recipient of the end product.	Will evaluate the final product for efficiency of operation and satisfaction of requirements.

GROUPFIVE Development Team	This group executes the entire plan, design, development, and implementation of the software system.	Plan, manage, and allocate personnel and resources to development tasks. Coordinate with Specify domain, non-functional, and functional requirements. Create design for overall system architecture to guide implementation. Implement the design for use by end-users.
Project Manager	Primary lead in direction of the project.	Coordinates activities and meetings. Liasion to the Professor. Allocating responsibilities to group members.
Requirements Engineer	Primary lead in defining use cases and product requirements.	Define and narrow product use cases. Define and refine product requirements. Ensure design and development meets product requirements
Design Engineer	Leads effort in overall system design	Lead system architecture direction. Work with requirements engineer to ensure system architecture works to satisfying system requirements.
Q.A. Engineer	Guides efforts in product stability	Oversee testcase design Validate product requirements, design, and implementation
Project Librarian	Tracks all important data related to the project.	Create, store, and distribute product documents as necessary Track product Intellectual Property & ensure secure access.

3.2   User Summary

Name	Description	Responsibilities	Stakeholder
Guest	*The guest is the user of the system who is staying or planning to stay at the hotel*	- *shop for items* - *create guest account* - *view bill* - *modify booking details* - *search for rooms* - *make a reservation* - *cancel reservation*	Self
Clerk	*The clerk is the user who helps manage the guest's stay and*	- *generate billing information* - *view room status* - *make a reservation* - *cancel a reservation prior to reservation start date*	Hotel Owner

	help with any issues the guests may have	- *modify a reservation* - *modify room information* - *process check-in/check-out*	
Admin	*The admin is the user who is in charge of maintaining the functionality of the system*	- *address system issues and bugs* - *create clerk accounts* - *modify existing account information*	Hotel Owner

3.3   User Environment

The system will be used by guests, clerks, and admins who will all be given differing levels of access to the system.

Guests may:

1. Shop for items (5+ minutes)
2. create an account (3 minutes)
3. Log in (1 minute)
4. View their bill (1 minute)
5. Modify booking details (5 minutes)
6. Search for rooms (5-20 minutes)
7. Create a Reservation (10-15 minutes)
8. Modify a Reservation (5-10 minutes)
9. Cancel a Reservation (3 minutes)

Clerks may:

1. Generate a bill
2. Modify a profile (5-10 minutes)
3. Modify room info (5-10 minutes)
4. View room status (1 minute)
5. Process check in/out (2 minutes)
6. Log in to their account (1 minutes)
7. Create a Reservation (10-15 minutes)
8. Modify a Reservation (5-10 minutes)
9. Cancel a Reservation (3 minutes)

Admins may:

1. Log in (1 minute)
2. Reset user password (3 minutes)
3. Create clerk account (5 minutes)
4. Create a Reservation (10-15 minutes)
5. Modify a Reservation (5-10 minutes)
6. Cancel a Reservation (3 minutes)

The system will be a digitization of the current process. The system needs to integrate with a payment service so that guests can pay their bills. A guest must be able to get help with any issues from a clerk or admin depending on the problem. A clerk must be able to get help from an admin for any issues.

The working environment of the target user is largely in an online, web-based application.

3.4 Summary of Key Stakeholder or User Needs

Need	Priority	Concerns	Current Solution	Proposed Solutions
Tracking Reservations	High	Gets complicated having to track all reservations manually	The system currently being used	A new system could track reservation info for the user that can be easily found
Making A Reservation	High	Guest has to either call or speak to clerk, which can only be done while a clerk is present	The system currently being used	A new system could allow the guest to make a reservation online without the help of a clerk
Canceling A Reservation	High	Guest has to either call or speak to clerk, which can only be done while a clerk is present	The system currently being used	A new system could allow the guests to cancel their reservation without the help of the clerk as long as it's more than 48 hours before their reservation
Getting Customer Bill	Medium	Bill has to be calculated manually, which introduces human error	The system currently being used	A new system could calculate and output the bill for the clerk
Finding Available Rooms	High	Guests must rely on the clerk to find available rooms	The system currently being used	A new system could present a list of available rooms which can be sorted by preference
Modifying Room information	Medium	Requires removing the room, and adding it back with the modifications	The system currently being used	A new system could allow rooms to be added or deleted through the system, and their information could be changed by the clerk/admin
Guests Shopping	Medium	Guests have to come to the front desk and speak to the clerk	The system currently being used for the other hotels	A new system could provide an online shopping experience with room delivery to simulate room service

Processing Check-In/Check-Out	Low	Guests have to stop on the way to their room to check in with the clerk	The system currently being used for the other hotels	A new system could allow guests to check in when they get there without having to speak to a clerk so they can just go straight to their room

3.5 Alternatives and Competition

- A range of hotel management applications exist that accomplish a similar function to our system. For examples include: Cloudbeds, Little Hotelier, and RoomRaccoon. The issue is that these are general solutions that do not offer the customization that our client wants. One huge issue is that our hotel also has a shop that needs to integrate into the system in order to provide a seamless experience for our users. This is not possible with existing out of the box solutions.

- Another alternative is to do nothing. This requires no investment nor training for employees which is a huge upside. The tradeoff is a lack of efficiency and more error prone reservations. Over time, the system's increase in efficiency and lower number of errors will more than make up for the initial cost and training of the employees.

4. Product Overview

4.1 Product Perspective

The service is provided through a backend webserver, which users interact with through web-browsers.

This product interacts with a third-party payment service to process user payment.

4.2 Assumptions and Dependencies

As the application is a web-service for a U.S based hotel, it is assumed that:

1. User assumptions
   a. Users are capable of reading and typing the english language
   b. Or alternatively, capable of using screen-readers, dictation software, or other accessibility devices to interface with the webpage.
   c. Users have means to access the internet via a relatively modern Desktop Browser. (Mobile and/or legacy browser support not guaranteed)
   d. Users can utilize one of the payment methods provided by our service partner to render payment.
2. Application assumptions
   a. The application will be supported by a server running a common Linux Distribution.
   b. The application's hardware will have configurable networking to facilitate the webserver and other communications.

5. Product Features

Feature	User	Priority	Stability	Benefit	Effort	Risk
Buy items	Guest	Medium	Medium	High	High	Low
Browse items	Guest	Medium	Medium	High	High	Low
Add items to Cart	Guest	Medium	Medium	High	High	Low
View items in cart	Guest	Medium	Medium	High	High	Low
Delete items in cart	Guest	Medium	Medium	High	High	High
Search for rooms	Guest, Clerk, Admin	High	Medium	Medium	Low	Low
Filter rooms by smoking/non-smoking	Guest, Clerk, Admin	Low	Medium	Low	Low	low
Filter by theme	Guest, Clerk, Admin	Low	Medium	Medium	Low	low
Filter by quality level	Guest, Clerk, Admin	Low	Medium	Medium	Low	low
Filter rooms by availability	Guest, Clerk, Admin	Low	Medium	Medium	Medium	low
Generate bill	Clerk	High	High	High	Low	High
Modify profile	Clerk	Medium	High	High	Medium	low
Modify room info	Clerk	Medium	High	High	Medium	low
View room status	Clerk	Medium	Medium	Medium	Low	Medium
Process check in/out	Clerk	High	High	High	Medium	Medium
Log in	Guest, Clerk, Admin	High	High	Medium	Medium	low

Reset user password	Admin	Medium	High	Low	Low	Medium
Create a clerk account	Admin	High	High	High	Low	Medium
Create reservation	Guest, Admin, Clerk	High	High	High	Medium	High
Modify reservation	Guest, Admin, Clerk	Medium	Medium	High	Medium	High
Cancel reservation	Guest, Admin, Clerk	Medium	Medium	High	Low	High
Restock items	Clerk	Medium	Medium	High	Medium	Medium
View bill	Guest	High	High	High	Low	High
Modify booking details	Guest	Medium	Medium	Medium	Low	Medium
Create guest account	Guest	High	High	Low	Medium	Low

6.   Other Product Requirements

- The system's server needs to be able to handle all requests from users.
- The system should respond to the user with sub 0.5 second delays in order to not frustrate the user.
- The user needs a valid internet connection to communicate with the server(s) that the system runs on.
- Any payment and personal information sent to and from the system must be encoded as to prevent data vulnerabilities.
- The system should maintain 99.9% uptime in order to minimize lost business by guests who cannot access the system.
- The system needs a back-up server that automatically engages if the main server goes offline
- The system, for the guest, should be simple to accommodate guests with low technological literacy.