

A FULL EXPERIENCE
IN A SMALL AND INTIMATE HOTEL
WITH HISTORIC FLAVOR

RED TEAM

Hotel Management Software Development Project

[Deliverable 3: Use Cases and UML Diagrams]

OCTOBER 7th, 2022



Client Information :

Hôtel Manoir Ramezay – Vivian (Proprietor)


492, rue Claude de Ramezay (Route 227),

Marieville (Québec) J3M 1J6

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CERTIFICATIONS:

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Date: 2022-10-07

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Date: 2022-10-07

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Date: 2022-10-07

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Signature: 

Date: 2022-10-07

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I. Statement of Prior Work

The work herein is possible in part due cumulative learning assignments and projects undertaken in the past, as part of the team's Software Development curriculum. As such, some of the ideas or technical skills used in this project originate partially from prior work. The table below lists past projects undertaken by members of the Red Team, which may contribute in part to elements found in the scope of this project.

Past Projects	Tools Used	Contributor(s)
Mock-ups for personal websites, Application Dev 1	Adobe Photoshop, Cava, Figma	All membres
Simulation Program	Java and Java Swing	Chi-Tao Li
Car Rental System	MS SQL Server	All members
Inventory Management System	Apache Derby Database, Java, and Java Swing	Patrick Larocque
Issue Tacker	C#, Google API, .NET, Firebase	Patrick Larocque
Added Prior Works used for this deliverable	Tools Used	Contributor(s)
Deliverable 1 Report	MS Word, Instagantt.com (for Gantt Chart)	All members
Deliverable 2 Report	MS Word	All members
Database course	Draw.io, Lucidchart	All members

II. Introduction

This document is the third deliverable and includes a series of diagrams and documents aimed at the assessment and diagnosis of business problems affecting our client's present management system. The red team implemented diagrams based on the information available at the time and after several phone interviews with our client. This deliverable focuses on understanding our client's current management information system, which will be the foundation for the following deliverables.

III. Executive Overview

The following document outlines the red team's activities, which include the extended version of the summary description of the client and the extended business problem, since we now have a better understanding of our client's current management system and how it operates. The reader will also find a Narrative description of the present information system, which was composed only after having completed all diagrams and once we had a better grasp of our client's actual problem. Following this section, the reader will find a completed Use Cases diagram from the existing management system that our client uses (Appendix 1).

Furthermore, the reader will find Use Cases templates, which show the procedures of the 2 specific Use Cases that we used (Appendix 2). The activity and sequence diagrams for a specific Use Case will then be presented in (Appendix 3), which describes the flow of activities in a system, in addition to a sequence diagram that describes the series of messages flowing from one object to another.

Next, the reader will find a class diagram for the entire existing information system that describes classes and their relationships in (Appendix 4). Moreover, in (Appendix 5), the state chart diagram illustrates the transition between the states in a specific class from our class diagram. Lastly, you will find documents and screenshots related to how our client accepts bookings and how to collect information's which is the main problem we need to resolve as a team, to give the best solution to our client (Appendix 6).

IV. Summary Description of the Client

Manoir Ramezay is a 3-star hotel located in Marieville \that owners bought it 4 years ago. This is the first time that owners manage the hotel business. They are of Chinese ethnicity, and they immigrated from China to Canada with their two children. During the four years they have been operating the hotel, their business is getting better.

The hotel has their own website. The website includes features typical for a hotel business, including a landing page which introduces the hotel along with images of its amenities, pages that describe the services offered. Guests can make a reservation through their website, as well as the third-party platforms, namely Expedia, Booking.com and Airbnb.

Their primary method of bookkeeping is to keep a record of reservations inside of a physical ledger, which is updated each time a booking is made through any of the various booking channels. They may also print booking confirmations they receive via email, for the purpose of bookkeeping. Moreover, they have not modified the website, other than for the purposes of COVID updates, and much of the management practices have remained unchanged.

Regarding computer skills, both owners and their staff have working knowledge of Microsoft's Office suite, along with a basic understanding of navigating the web, and using email services. Management has expressed a willingness to learn any new software tools, should it help them operate their business and solve their current business problems. Their business has grown since it was acquired, and the staff at Manoir Ramezay has voiced their desire to improve and modernize their management systems to solve the business problems they see themselves facing.

V. Description of the Business Problem

The hotel doesn't have an efficient system in place to keep track of room availability across all their booking channels. When a room is booked through one of their platforms, front-desk staff must update a physical ledger or print out a confirmation from a third-party platform.

Front desk staff must then manually change the room's availability across all other platforms to avoid duplicate bookings and to reflect the actual availability. This is a very inefficient process, especially when the hotel is busy, during the summer months. The front-desk staff is often preoccupied with assisting on-site clients and fulfilling requests, so much so that they are unable to keep up with the current methods of data entry. The potential for double bookings, and overworked front-desk staff may lead to poor experience for the client, leading them to choose another establishment in the future. Moreover, if a repeat client returns to the hotel to book a room, the front-desk staff must reference the physical ledger or paperwork to find their personal information or preferences (if any were noted). This often leads to the client having to repeat much of the same information that was given during prior visits.

As it stands, the current business problem has to do with efficient booking management. The current process is inefficient, leading to inaccurate room tallies, overworked front-desk staff, an inability to answer client questions and the potential for poor client experience as a result. Writing down all guests' information on paper is a slow and error prone process and appears to be a pain point with respects to the hotel's day to day operations. Front-desk employees need to be able to quickly verify guest's personal information for the check-in and check-out process to be as seamless as possible. Booking and client information is spread across many tools and platforms, each needing to be cross-referenced every time a booking is made. This creates a bottleneck for the business if it wishes to continue growing..

VI. Narrative Description of the Present Information System

Making a reservation at Manior Ramezay can be made in one of three ways. Online, by phone, or in person. A reservation made online can be made through several different booking platforms. Namely, directly through Manoir Ramezay's [website](#), or through one of several third party booking platforms (Booking.com, Expedia, Hotels.com, Priceline.com, etc...). Booking online sees the prospective guest access one of the booking platforms. The guest then browses a selection of rooms, until they have made a choice. The guest then verifies that the room that satisfies their needs is available on the dates they wish to visit. The booking platform returns the availabilities to the user, at which point the user may choose to proceed with their reservation.

The booking platform will request the guest's personal information, which includes the name of the primary guest, the names and number of additional guests, the primary guest's address, phone number, email address and date of birth. Once the guest has provided the necessary personal information, they will be presented with a choice of payment options. The guests pay provide a credit card for immediate payment or for a hold/deposit to be placed on their credit card. Alternatively, they can pay in cash, or debit during their check-in, however, a credit card number is still necessary to secure their reservation. Once the guest has provided their payment information, their reservation is confirmed. They will receive a confirmation email, and the booking platform will also send a notification email to Manoir Ramezay with the guest's booking information. Staff at Manoir Ramezay must then update other booking platforms, along with their physical ledger, to reflect the change in availabilities across all platforms.

Guest may also call in to book a reservation. In this instance, the clerk or receptionist will handle the guests' requests by fielding relevant questions pertaining to the rooms and current availabilities. Choose the potential guest wish to proceed, the receptionist will then gather the guest's personal and payment information and send the guest a confirmation email. The receptionist must then ensure to update the hotel's availabilities across all channels once again. A walk-in reservation functions in much the same manner. However, the guest is provided a physical form to be filled out, which serves to record all the relevant personal and payment information. Finally, the receptionist will enter the reservation details and, if they stay is immediate, the client will provide payment and check into their rooms, else, if the stay is for a future date, they will be sent a confirmation email. The reservation form will be stored in a physical ledger for future reference. Once again, the receptionist must update availabilities across all booking channels.

VII. Appendix 1 - Use Case Diagram

VIII. Appendix 2 - Use Cases Templates

Appendix 2a; Online Booking

Use Case ID:	#1 Booking online		
Use Case Name:	Make an online booking		
Created By:	Murat	Last Updated By:	
Date Created:	2022-10-05	Last Revision Date:	
Actors:	Client, administrator		
Description:	Book a room at hotel		
Trigger:	When client access online booking		
Preconditions:	Client is logged and has access to hotels site		
Postconditions:	room must be booked		
Normal Flow:	1 Client enters a gateway for hotel 2 Client chooses, check in and check out dates, and room type 3 The system provide availability and price 4 Client accepts and asks for a room. 5 Client provide name and required information 7 The system makes a booking and assigns a booking number 8 The system shows reservation number to client 9 The system creates and sends a confirmation to client by email 10 The system sends booking information to the hotel		
Alternative Flows:	At 2) -Required room not available -The system offers alternative rooms		
Exceptions:	At 2) -Client declines offer -Exit		
Includes:	None		
Frequency of Use:	Every time when a client booking, 2 to 6 times daily.		
Special Requirements:	None		
Assumptions:	None		
Notes and Issues:	None		

Appendix 2b; Online Payment

Use Case ID:	#2 online payment		
Use Case Name:	Payment		
Created By:	Murat	Last Updated By:	
Date Created:	2022-10-05	Last Revision Date:	
Actors:	Client		
Description:	To pay for the booking room		
Trigger:	When a client decides to pay for the booking room		
Preconditions:	Client must have username, password and credit card. Client must has to provide correct information. The system has information of booking room by client		
Postconditions:	System must be working Client receives booking information		
Normal Flow:	1. Client log on system. 2. Client enter their user ID and password. 3. The system requests customer payment information. 4. Client fills the information about payment. Client enter amount of money Client enter credit card number, security cod and expiration date Client confirm operation 5. Client information and payment are verified 6. Client information is documented in the system 7. The system generates and sends an booking information to the client by e-mail		
Alternative Flows:	At 2) If user ID and password are incorrect, the system will prompt to client to retry to log on. At 4) -Client payment information is invalid. -The system asks the client to re-enter their payment information; it is possible that the client made a mistake.		
Exceptions:	At 4) -If the payment information is still invalid -The system rejects the request		
Includes:	None		
Frequency of Use:	Every time when a client booking room online, 2 to 7 times daily.		
Special Requirements:	None		
Assumptions:	None		
Notes and Issues:	None		

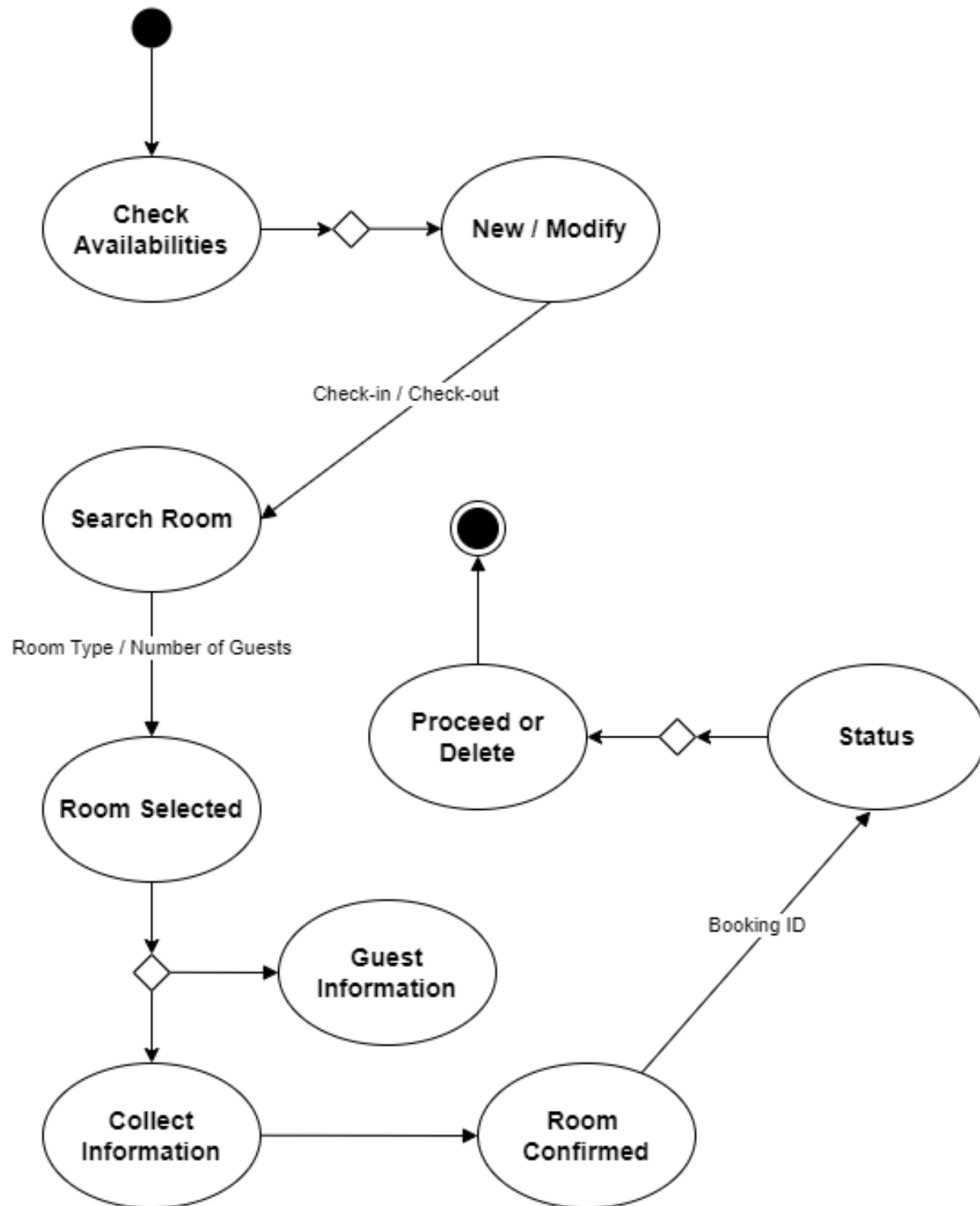
IX. Appendix 3 - UML Diagrams

Appendix 3a; Activity Chart Diagram

Appendix 3b: Sequence Diagram

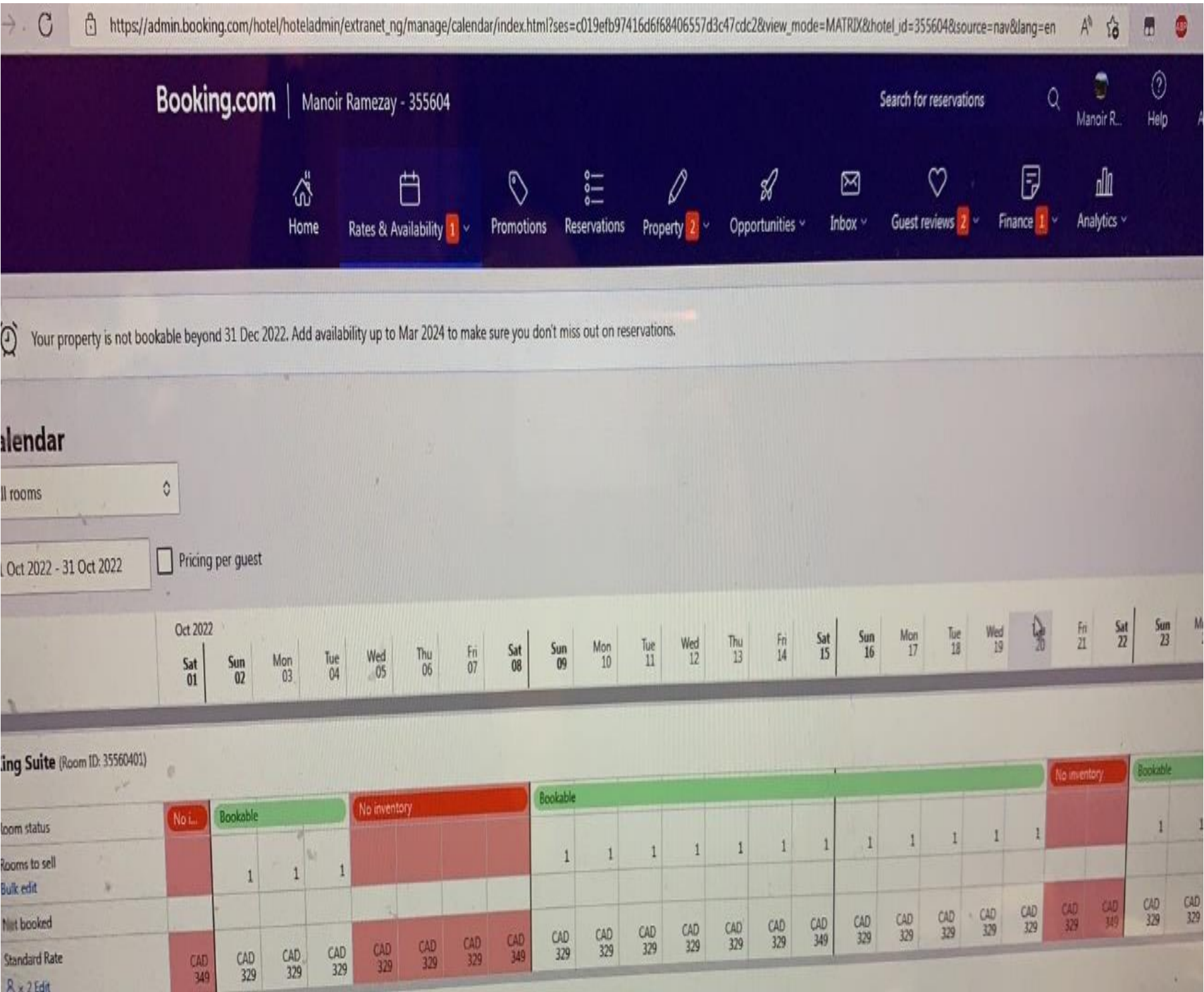
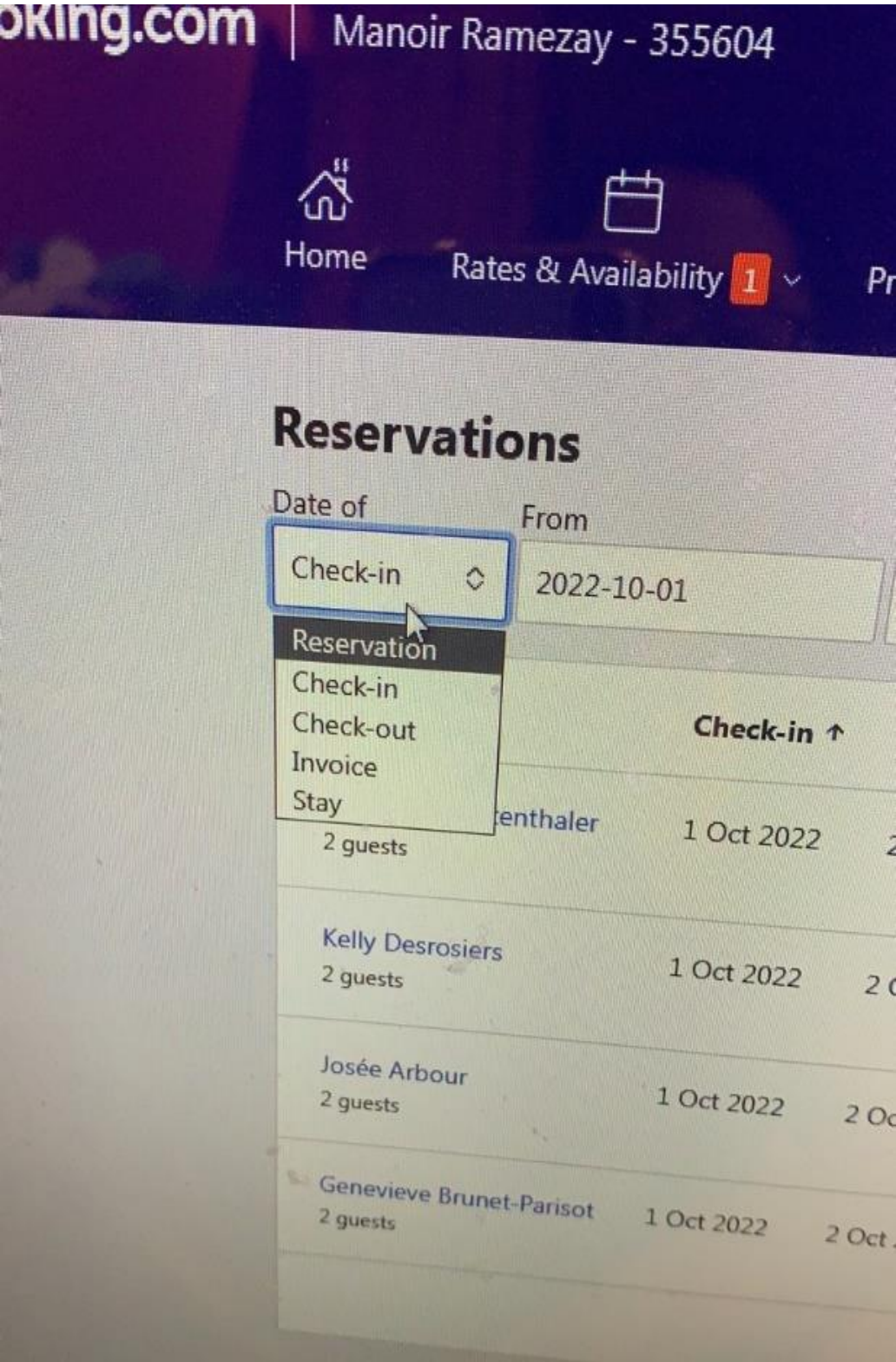
X. Appendix 4 - Class Diagram

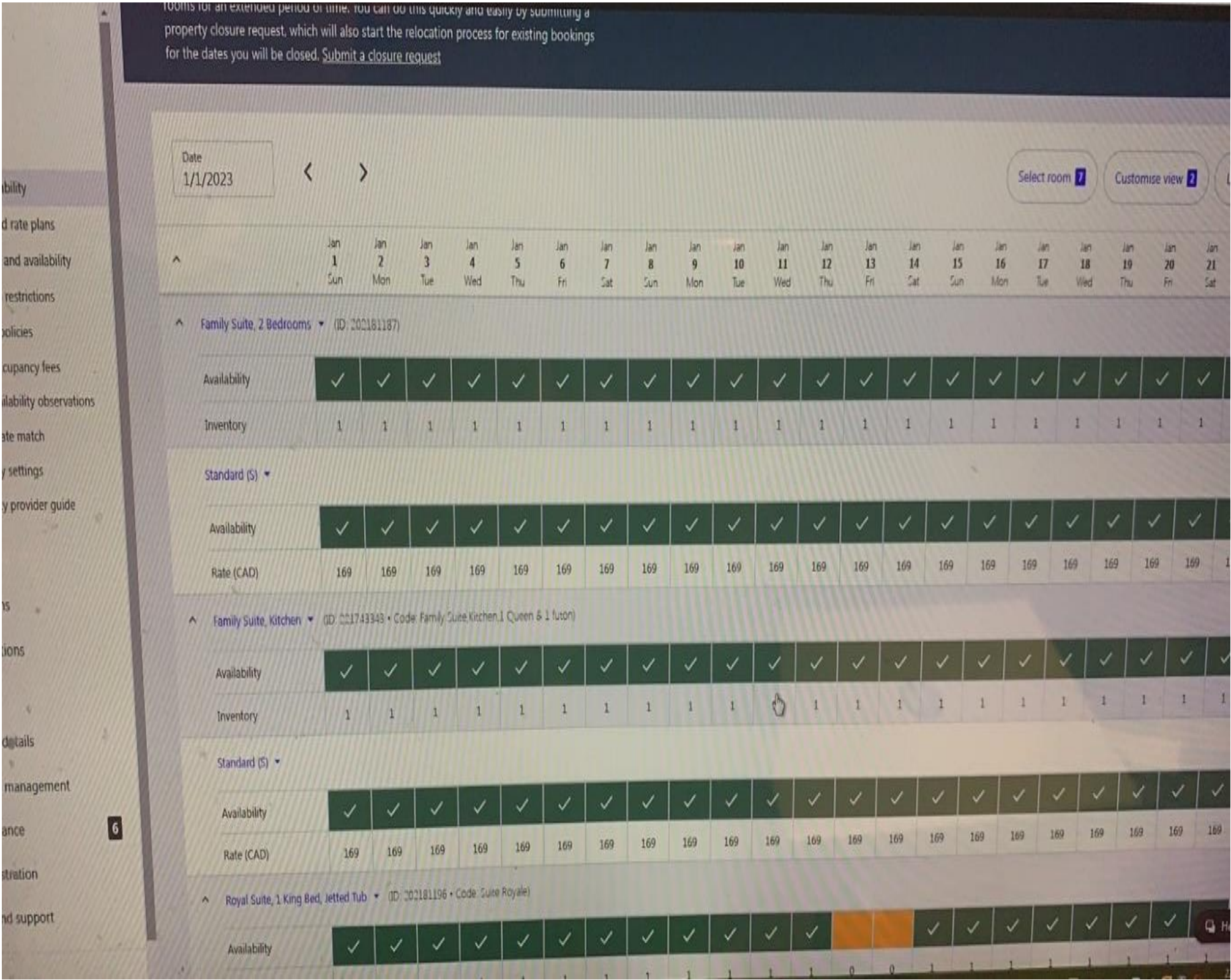
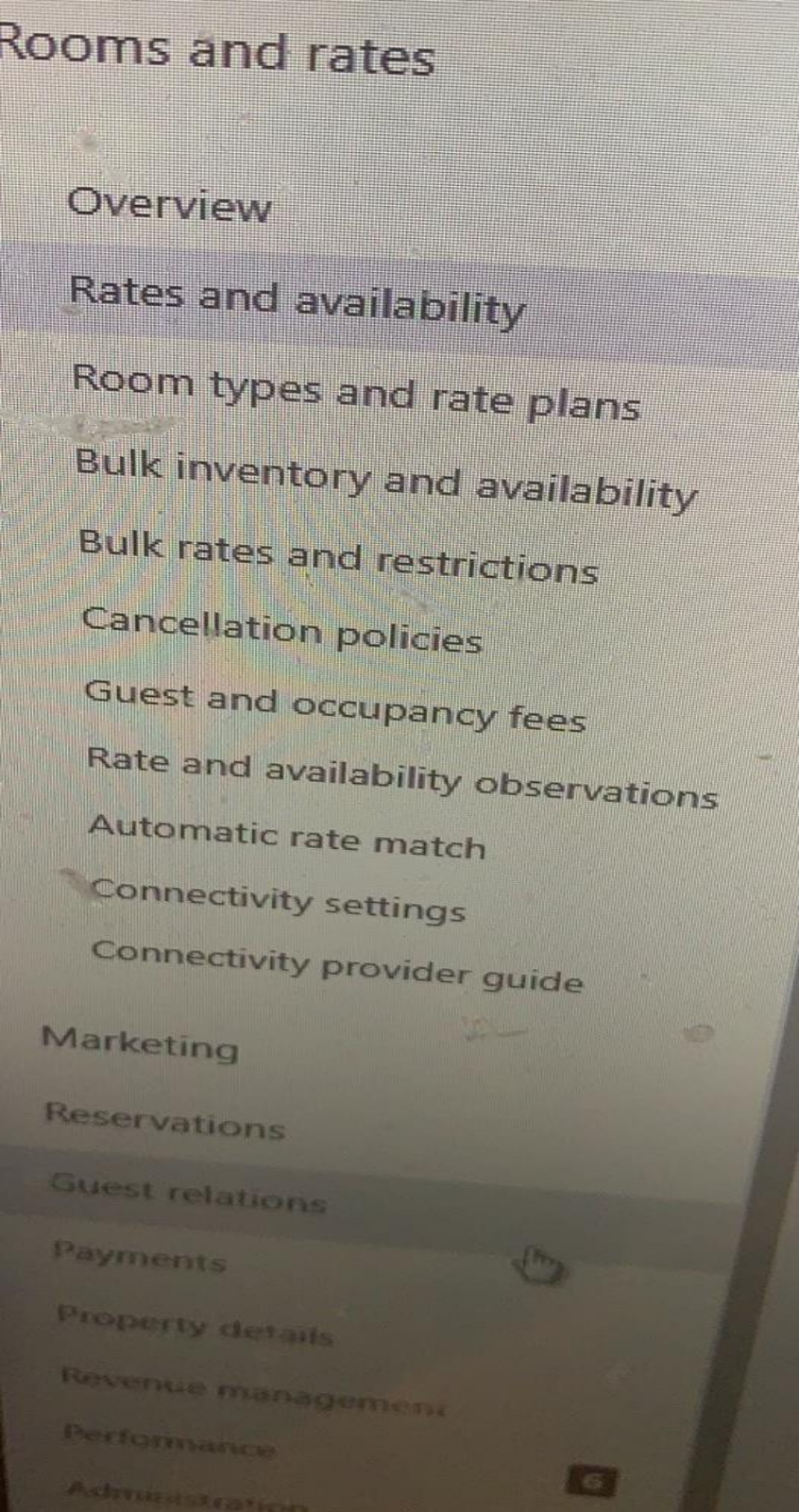
XI. Appendix 5 - State Chart Diagram



XII. Appendix 6 - Copies of Forms/Screenshots

BOOKING.COM





HOTEL WEBSITE

[illegible][illegible]

IN PERSON (BOOKING FORM)

No. Permis de conduire (réservé à l'hôtel)

FICHE D'ENREGISTREMENT

1NOM : _____

2PRENOM : _____

ADRESSE : _____

VILLE : _____

PROVINCE : _____

CODE POSTAL : _____

3TELEPHONE : _____

PAYS : _____

VÉHICULE, MODÈLE : _____

COULEUR : _____

ADRESSE ELECTRONIQUE : _____

4DATE D'ARRIVEE : _____ / _____

5 nombre de nuitée : _____

11DATE DE DEPART : _____ / _____

6 nombre de personne : _____

12CHAMBRE no : _____

13PRIX : _____

7HEURE APPROX DE L'ARRIVÉE : _____

8***La prise de possession des clés se fait entre 3 :00 pm et 12 :00 pm.

14total brut

19 Calendrier compléter : _____ (x)

15 tx d'hébergement

16TPS

17 TVQ _____

18

NO DE CARTE DE CRÉDIT : _____

visa mc

9NUMÉRO : _____

10EXPIRATION : _____

code validation a 3 chiffre : _____

Reimbursement conditions:

L'annulation ou les modifications doivent être effectuées 48 heures avant la date d'arrivée pour éviter les pénalités, sinon la facture complète sera facturée.

*****CONDITIONS ET RÈGLEMENTS DE NOTRE ÉTABLISSEMENT*****

1-Nous vous demandons, **en tout temps, de respecter la tranquillité** des autres clients.

2-Entre **10 h PM et 10 h AM** vous devez parler à voix basse dans les aires communes (couloirs).

3-Une **tenue convenable** est exigée dans tout l'hôtel.

4-**Aucune chandelle** n'est tolérée dans le manoir.

5-Le **spa extérieur (4 saisons)** est strictement réservé aux clients de l'hôtel (aucun invité).

6-Le montant de tout objet brisé, endommagé ou volé sera prélevé sur votre carte de crédit, ainsi que la perte des clés ou la non restitution de celles-ci (40\$).

7-Le montant du nettoyage de tout objet taché par, huile de massage, vin ou autre sera prélevé sur votre carte de crédit.

8-Toutes les chambres et salles de bain sont **NON-FUMEUR**. Toute personne ne respectant pas ce règlement, se verra prélever automatiquement un montant de **300.00\$ D'AMENDE** supplémentaire sur leur carte de crédit pour le nettoyage de la chambre. **Aucun avertissement ne sera émis.**

9- **LA FÊTE N'EST PAS AUTORISÉE DANS TOUTES LES CHAMBRES D'HÔTEL.**

10- **LES VISITES NE SONT PAS AUTORISÉES DE 22H00 À 7H00.**

11 - **Le check-out ou libération des lieux est au plus tard à 11 h AM.**

*Je soussigné (é), avoir lu, compris et accepté les conditions et règlements mentionnés ci-dessus.

SIGNATURE : _____

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Parker, K. (2009, February 1). *How to buy & run a small hotel: 5th edition* (5 Rev Upd). How To Books.

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