

Colin Gillette

Jarrold Kolbe

Shankar Joshi

Claire Ramsey Lu

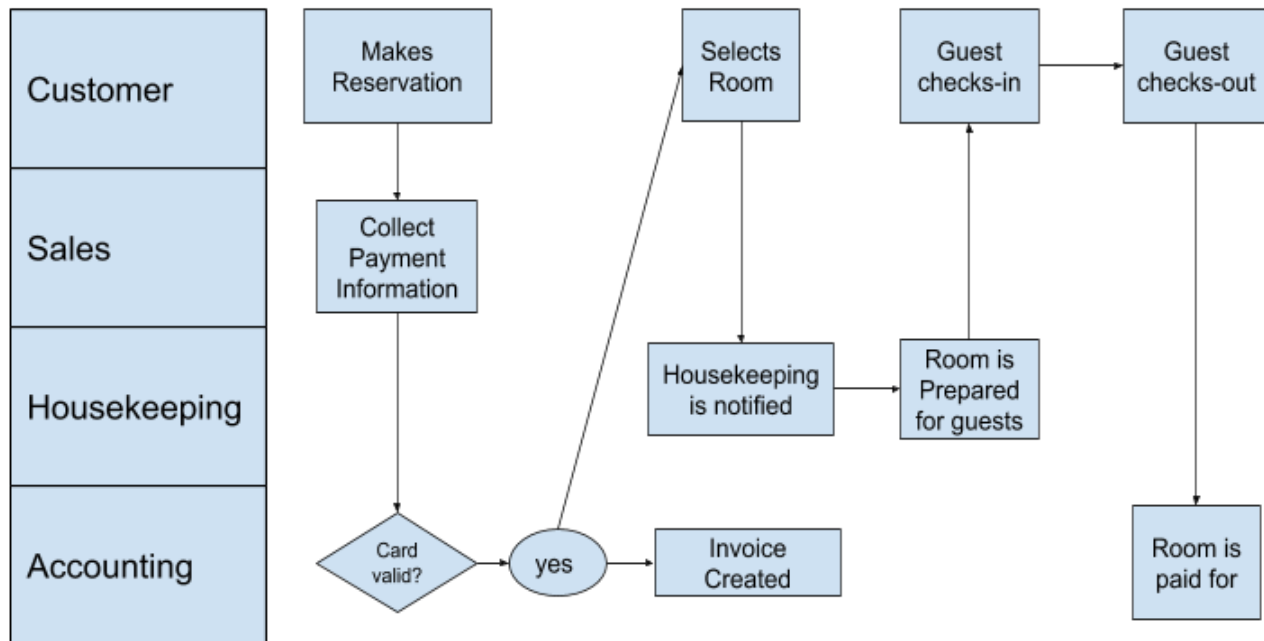
Application Design

This document includes the Business Process Model, the Automation Diagram, and the Web Application hierarchical design.

Starting on Page 5, you can find step-by-step documentation on how to use the program.

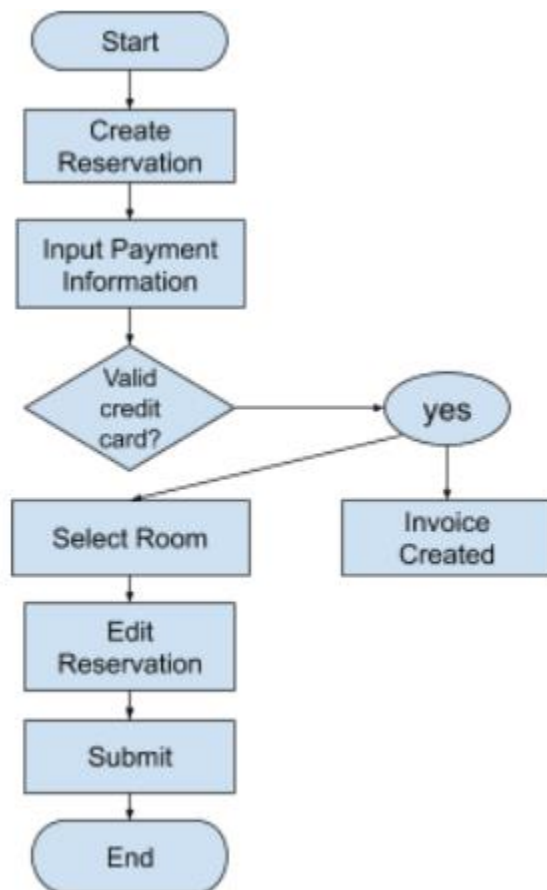
Our peer evaluation is listed on the last page of this document.

Business Process Model

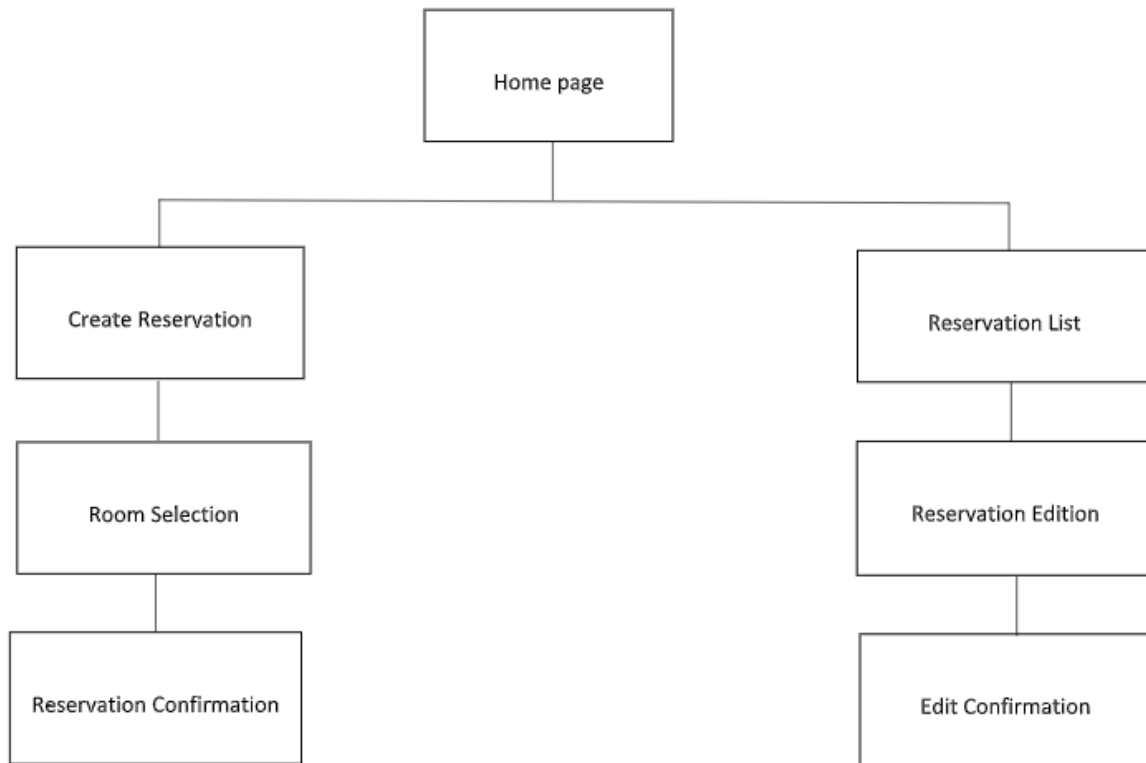


The above business process is a model of a hotel system. First, a customer will have to make a reservation for a room. Once the reservation is made, payment information is collected which creates an invoice for the customer if their credit card is valid. If the credit card is valid, the customer will then be able to select their room from those available. Once the room is selected, housekeeping will be notified and will prepare the room for the customer. Once the customer arrives at the hotel, they will check-in with the front desk. At the end of their stay, the customer checks-out of their room and is billed for their stay at the hotel.

Business Logic of Automation



Hierarchical Page Layout



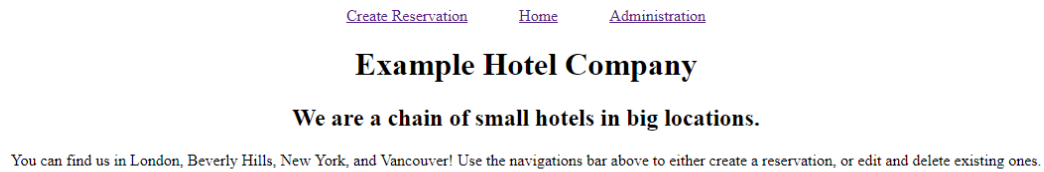
Documentation

The following documentation models the use of the Reservation creator for our example hotel chain. The program assumes that it is being run by a hotel employee. These employees would be the only ones allowed to see the full list of reservations. This adds an extra layer of client-side validation by booking through the system for the potential customers. This system serves as automation of booking management for these employees, which is a task that would be made more difficult if it had to be done across all locations on pen and paper.

Installation

For your convenience, this software comes with a single script called **master.sql** that can be run to create all necessary items for the site (assuming you already have a DAD set up). Simply running the script and navigating to the homepage will allow you to use the system. The install comes with a small amount of sample data for testing.

Home Page



Above is a screenshot of the home page of the site. This is where users should start, and can be reached by navigating to `127.0.0.1:8080/DAD_NAME/home_page`.

This site has two “tracks” that a user can follow. The user can either create a new reservation, or edit an existing one. Existing reservations can be deleted from the Edit Reservation Track. This documentation is organized by track, starting with the Create Reservation Track.

Create Reservation Track

Create Reservation Page

[Create Reservation](#)[Home](#)[Administration](#)

Create Reservation

First Name: Last Name: Number of Adults: Number of children: Arrival Date: Departure Date: Location: Card Number: Card Company:

Valid card numbers for each company start with these numbers:

Card Company	Starts With
--------------	-------------

American Express	3
------------------	---

Visa	4
------	---

Mastercard	5
------------	---

Discover	6
----------	---

This page allows the user to create a new reservation. Here the user can enter the customer's name, card number, card company, number of adults, number of children, their arrival date, their departure date, and which hotel location they would like to travel to. By hitting proceed, they will be taken to the next page, which will display the rooms that are available at their location during the selected dates for the specified number of people.

Room Selector

[Create Reservation](#)[Home](#)[Administration](#)

Example Rooms

Rooms Available

- ☐ Room A200 Non-Smoking Price: \$90.00 per night
- ☐ Room A300 Non-Smoking Price: \$120.00 per night
- ☐ Room A500 Non-Smoking Price: \$150.00 per night

This page will display all available rooms at the specified location that fit the allocated number of people. Any room that has a date or capacity conflict will not be listed for the user to choose from. By selecting an option and clicking "Select Room", the user will be taken to a confirmation screen. This screen will perform the actual insert into the database.

Reservation Creation Confirmation

[Create Reservation](#)[Home](#)[Administration](#)

Reservations

Your Reservation

Full Name:	Example Customer
Reservation ID:	11
Arrival Date:	13-MAY-19
Depart Date:	17-MAY-19
Reservation Location:	Vancouver Room A200
Adults	2
Kids	1

This is the last page in the Reservation Creation track, and shows the information for the newly created reservation. This reservation will now appear in the Administration page (also known as the Edit Reservation track), which will be shown on the next page. The user is safe to navigate away from this page using the NavBar at the top of the screen.

Edit Reservation Track

Reservation Selector

[Create Reservation](#)
[Home](#)
[Administration](#)

Current Reservations

London

Customer Name	Room Number	Price per Night	Arrival Date	Departure Date
<input type="radio"/> John Doe	102	125	01-JUN-19	04-JUN-19
<input type="radio"/> Tory Lane	101	100	12-JUN-19	15-JUN-19

Vancouver

Customer Name	Room Number	Price per Night	Arrival Date	Departure Date
<input type="radio"/> Example Customer	A200	90	13-MAY-19	17-MAY-19
<input type="radio"/> Jane Buck	A400	140	03-JUN-19	10-JUN-19
<input type="radio"/> John Doe	A200	90	15-JUN-19	18-JUN-19

New York City

Customer Name	Room Number	Price per Night	Arrival Date	Departure Date
<input type="radio"/> Frank Caliendo	1201	180	02-JUN-19	04-JUN-19
<input type="radio"/> Jane Buck	1200	250	05-JUL-19	08-JUL-19
<input type="radio"/> Jeff Smith	1202	145	15-JUL-19	22-JUL-19

Beverly Hills

Customer Name	Room Number	Price per Night	Arrival Date	Departure Date
<input type="radio"/> Jeff Smith	300	500	01-JUN-19	04-JUN-19
<input type="radio"/> Frank Caliendo	101A	160	11-JUN-19	15-JUN-19
<input type="radio"/> Tory Lane	202	225	24-JUL-19	27-JUL-19

Submit

This page shows all current reservations to the User. This list is organized by arrival date, and filters out any reservations that have already passed. The User can select any reservation in the list and press **Submit** to edit or delete that reservation and its associated customer. The reservation we created earlier can be seen within the list. The next few pages will edit that example's reservation.

Edit Reservation

[Create Reservation](#)[Home](#)[Administration](#)

Reservations

Edit Reservation

Reservation number: 11

Vancouver: Room A200 priced at \$90.00 per night.

First Name:
Last Name:

Card Information:

Current Dates of Stay: 13-MAY-19 - 17-MAY-19

Arrival Date:
Depart Date:

Adults:
Children:

This page automatically populates with information about the reservation. Changing any items in the fields and then pressing **Submit Edits** will save the new changes, assuming they are valid. If they are not, the next page will tell us so. If we wanted to just delete this reservation, we would simply hit the **Delete Reservation** button. Both scenarios will be shown on the next page. Notice that we have made a few edits, such as extending the depart date of the stay, lowering the number of Children to 0, and changing the card number. Note that the available number of adults and children to select will be limited by the total capacity of the room this time.

Edit Reservation Confirmation

The page above will be displayed if we were to hit **Submit Edits** from the previous page.

[Create Reservation](#)

[Home](#)

[Administration](#)

Reservation Edited

The following Customer information has been saved for Reservation 11

Full Name: Example Customer

Card Number: 4122555566663337

Card Company: Visa

The following Reservation information has been updated and saved for Reservation 11

Number of Adults: 2

Number of Kids: 0

Arrive Date: 2019-05-13

Depart Date: 2019-05-20

The page above will be displayed if we were to hit **Delete Reservation** from the previous page.

[Create Reservation](#)

[Home](#)

[Administration](#)

Reservation Deleted

This represents confirmation that Reservation 11 has been deleted. Please use the navigation buttons above to go to another page.

In either case, the user can navigate away using the NavBar above.

Peer Evaluation

Evaluator	Score Given to: Colin Gillette	Score Given to: Shankar Joshi	Score Given to: Jarrod Kolbe	Score Given to: Claire Lu
Colin Gillette	100%	100%	100%	100%
Shankar Joshi	100%	100%	100%	100%
Jarrod Kolbe	100%	100%	100%	100%
Claire Lu	100%	100%	100%	100%