Project 1: Hotel Webpage

John Gallino
CSIT 537-01
Web Development
Professor Jenq

Table of Contents

Description

The Hotel Gallino website is a basic design for a fictional hotel that includes 14 rooms, numbered 1 to 15 (the hotel follows the superstitious tradition of omiting Room 13). All pages feature a header with navigation links and a footer with contact information. The page follows a simple dark red and white color scheme in keeping with the branding of the hotel.

The home page includes the neccesary Check Availability form for potential guests. Visitors can input a check-in and check-out date, as well as number of Adult and Child guests. The Check-In date may not be prior to the current date, and Check-Out may not be prior to tomorrow’s date.

Once submitted, the form will direct the user to a page displaying available rooms for the given dates that provide enough beds for the given amount of guests. If there is no availability, the visitor is told so.

Each displayed room has its own “Book Now” button, which will take the user to a third page that will ask for reservation information. This includes the guest’s name, email address, and phone number. This information is stored on the backend for future reference and promotional emails. Also on this page is a calculation of the cost of the stay.

Upon submitting their contact information, with one final click the reservation is added to the backend database and the booking is complete.

Other pages include the Dining and Bar pages that feature current dining and cocktail menus. The final page is a Rooms & Suites directory that outlines all of the rooms of the Hotel Gallino and their bed configurations.

System Design

The foundation of the Hotel Gallino webpage is the reservation system. The goal was to store every individual reservation as a record on file. When a new visitor uses the sites Check Availability form, the system first queries all rooms that can accomodate the number of guests inputted. Then the next step is to scan all of the stored reservations and *subtract* any rooms not available during the vistior's check-in and check-out dates. The remaining results display only rooms that both provide enough beds and are available during the dates provided by the user.

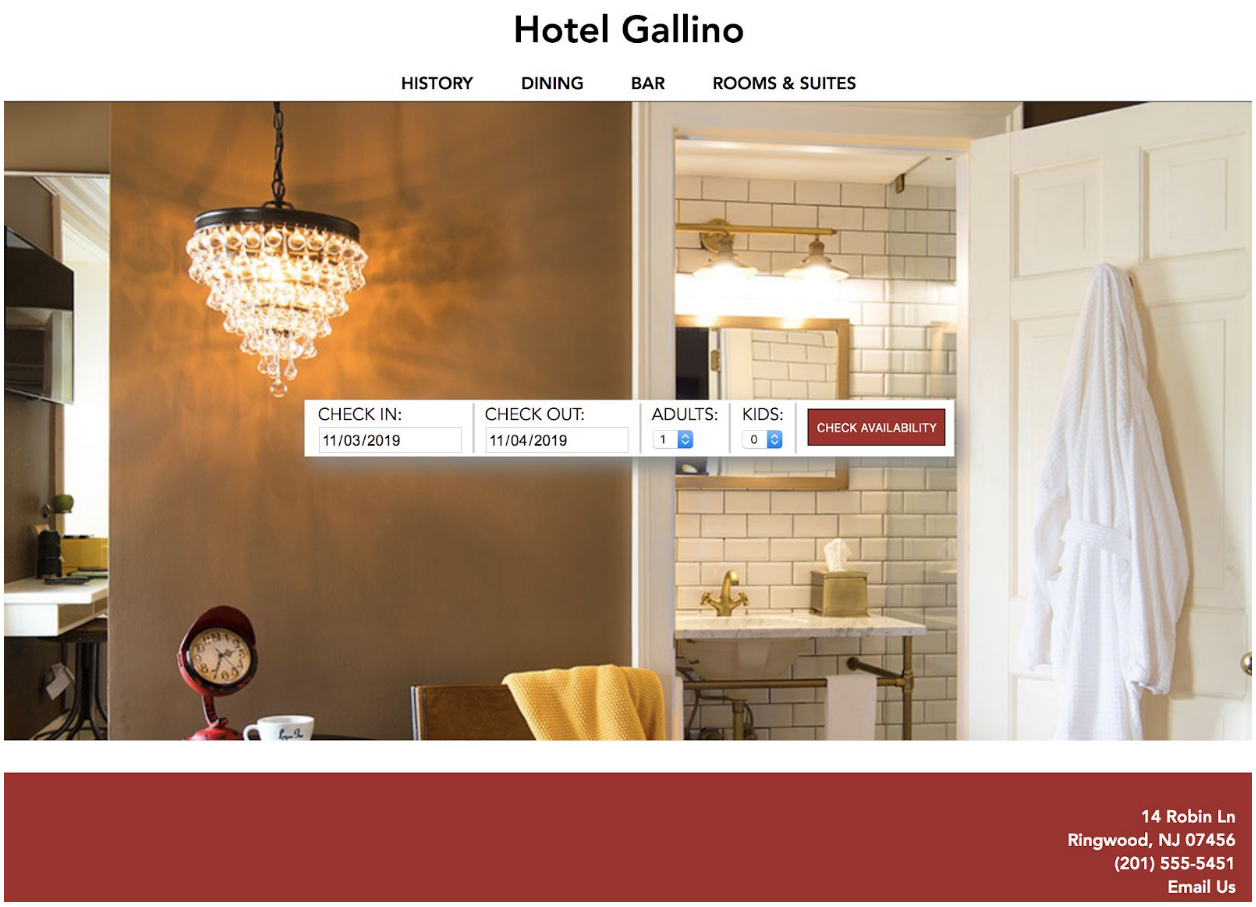
Implemenation

The system is built using a typical AMP stack of Apache, MySQL, and PHP. The MySQL database includes three tables - customers, reservations, and rooms.

The **customers table** keeps track of all guests who book through the website. Their name, phone number and email address are stored for future promotional purposes. The system also keeps track of how many cumulative nights the guest has stayed at our hotel, allowing us to reward our most loyal customers.

The **reservations table** stores each room reservation as a record that includes check-in date, check-out date, room number, and guest (a foreign key from the customers table).

The **rooms table** includes the 14 rooms of the hotel. The data in this table is relatively static and will rarely be edited. Each room has an assigned number, amount of beds, how many people may sleep in the room (may be greater than or equal to the number of beds), and the room type. Also included is the nightly rate for the room and the URL for an associated photo.


Hotel Gallino

HISTORY DINING BAR ROOMS & SUITES

CHECK IN: 11/03/2019
CHECK OUT: 11/04/2019
ADULTS: 1
KIDS: 0

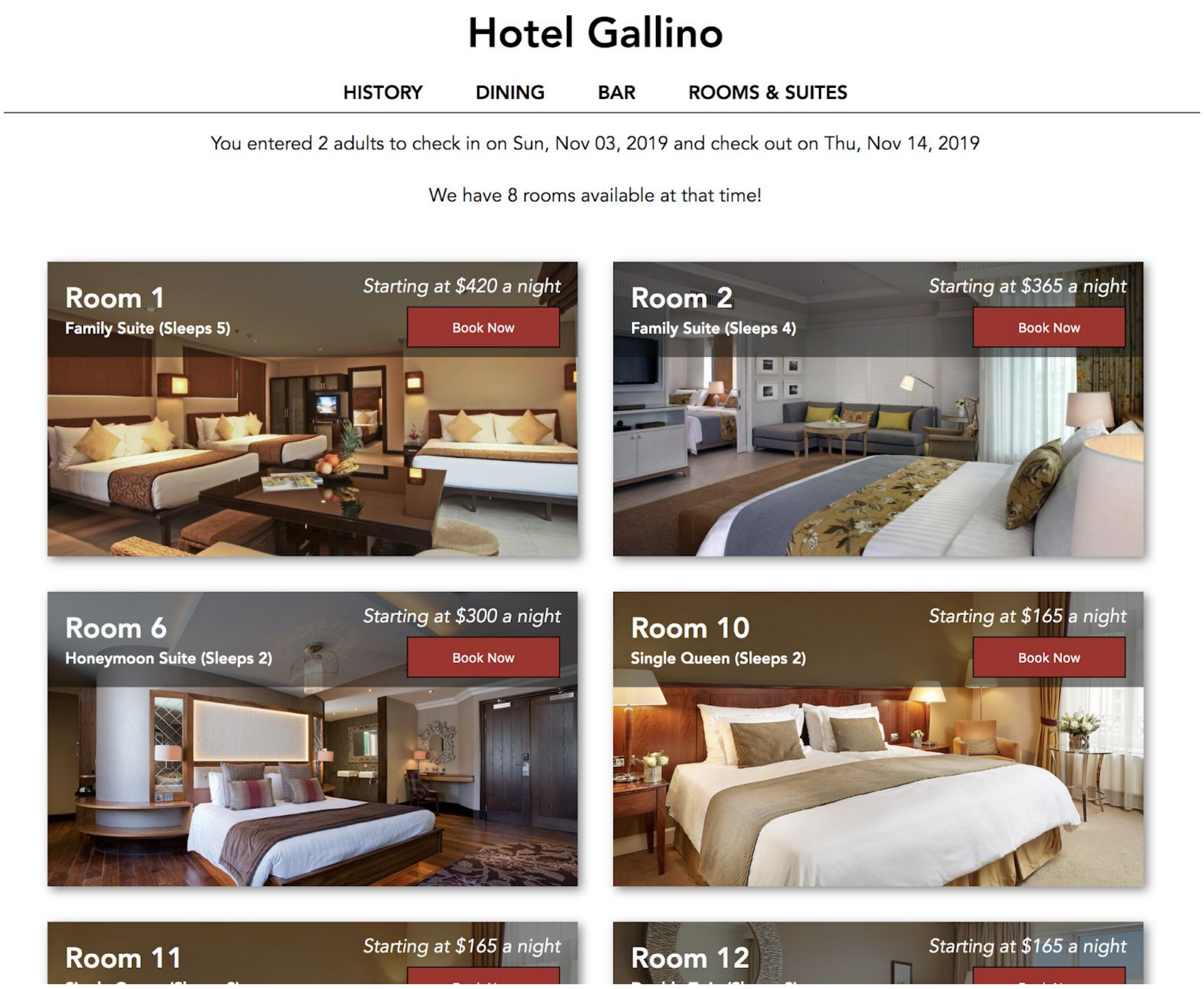
14 Robin Ln
Ringwood, NJ 07456
(201) 555-5451
Email Us

The **Check Availabilty** form on the home page may seem simple on the surface, but requires some complex querying on the back end. Once the user as inputted their data, the AMP stack follows a three step process

1. Collect all hotel rooms from the **rooms table** that have sufficient beds for the amount of guests given - using the “sleeps” column in the room table rather than the “beds” column

2. Scan through the **reservations table** for any records where the check-in date is after the visitor’s submitted check-in date but before the vistor’s submitted check-out date OR where the check-out date is after the visitor’s submitted check-in date but before the vistor’s submitted check-out date. These rooms are not available for the submitted dates and are elliminated from the search results.

3. Return the remaining rooms to the user. The user’s query is visible in the URL because a GET method is used.


Hotel Gallino

HISTORY DINING BAR ROOMS & SUITES

You entered 2 adults to check in on Sun, Nov 03, 2019 and check out on Thu, Nov 14, 2019

We have 8 rooms available at that time!

Room 1
Family Suite (Sleeps 5)
Starting at $420 a night
Book Now

Room 2
Family Suite (Sleeps 4)
Starting at $365 a night
Book Now

Room 6
Honeymoon Suite (Sleeps 2)
Starting at $300 a night
Book Now

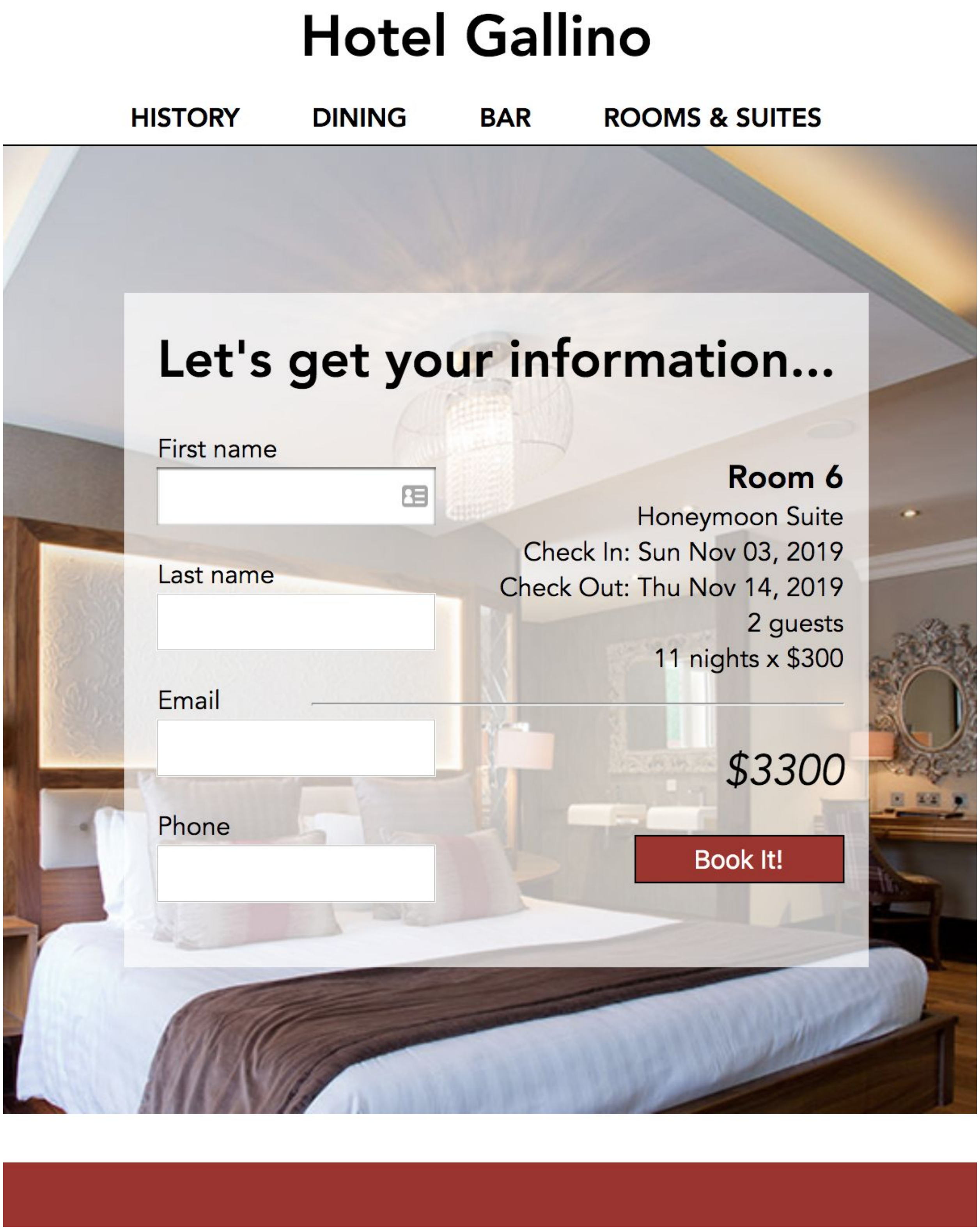
Room 10
Single Queen (Sleeps 2)
Starting at $165 a night
Book Now

Room 11
Starting at $165 a night

Room 12
Starting at $165 a night

Upon making their room selection, the user is taken to a page that displays the cost of their stay by calculating the number of nights multiplied by the rate of the room selected.

This same page asks the visitor for their contact information - name, phone number, and email address. The system checks the **customers table** to see if the visitor is already in the database. If not, they are added to the table and assigned a customer ID number that will be used to reference them in the **reservations table**.



Hotel Gallino

HISTORY DINING BAR ROOMS & SUITES

Let's get your information...

First name

Last name

Email

Phone

Room 6

Honeymoon Suite

Check In: Sun Nov 03, 2019

Check Out: Thu Nov 14, 2019

2 guests

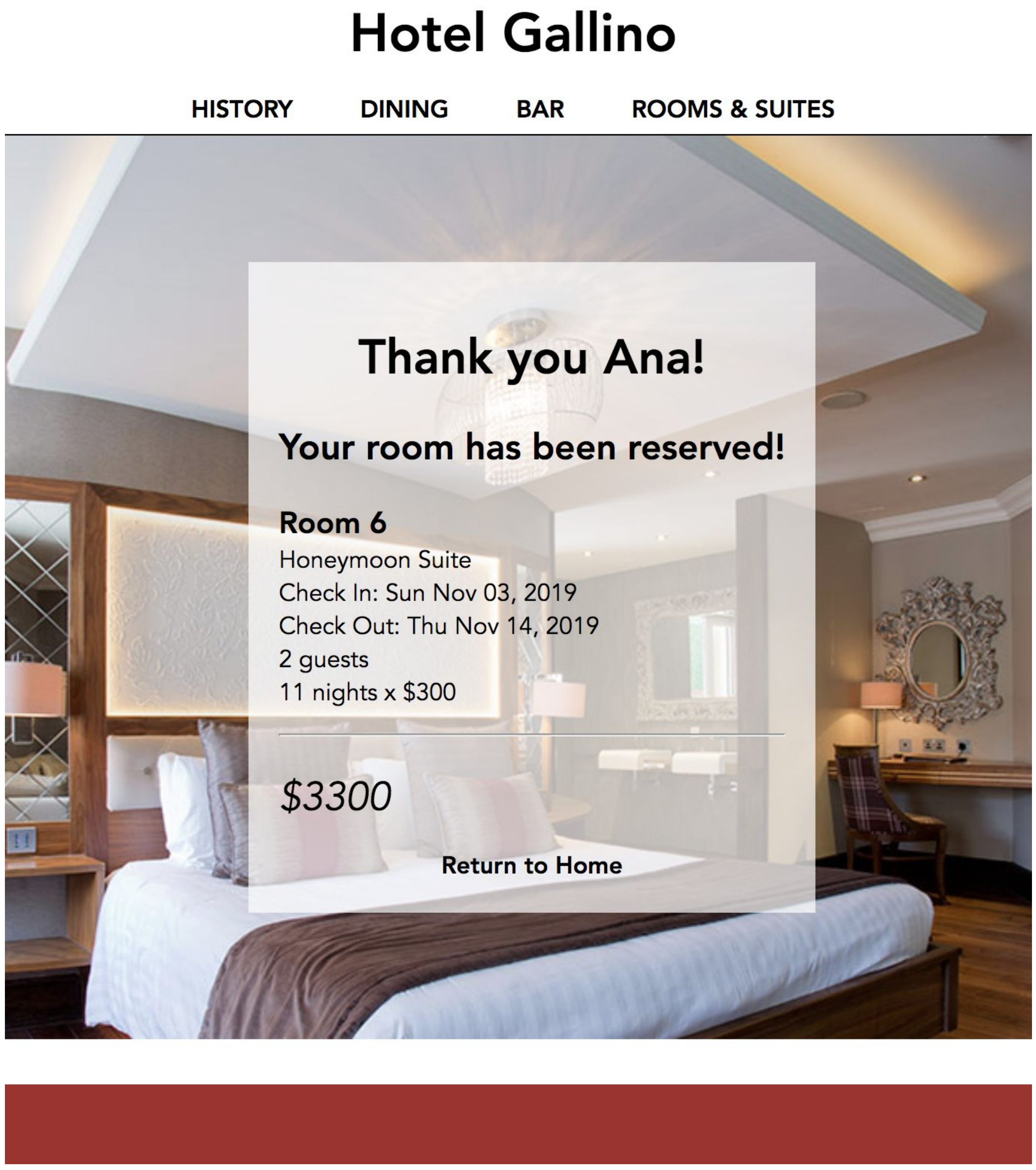
11 nights x $300

$3300

Book It!

Information about the user and their data is stored between pages using the $_SESSION superglobal variable. The user's inputted contact information is handled with the POST method and is not visible in the URL once submitted.

Input data is sanitized throughout to prevent SQL injection attacks.


Hotel Gallino

HISTORY DINING BAR ROOMS & SUITES

Thank you Ana!

Your room has been reserved!

Room 6
Honeymoon Suite
Check In: Sun Nov 03, 2019
Check Out: Thu Nov 14, 2019
2 guests
11 nights x $300

$3300

Discussion

Much of the website is rudimentary and not ready for publication. Most of the focus was spent on designing the reservation system, with less emphasis on the other areas of the webpage and the overall design. Although a good start, the page would benefit from more imagery and some scrolling galleries to display the rooms.

The code, likewise, could be much improved. Although an external stylesheet file is used, much of the styling is still in-line which is generally considered bad practice. Furthermore the code could benefit from more comments to increase clarity for other coders who may work on it in the future. Some code is uneccesarily repeated. The site is also not yet optimized for mobile display.

Lastly much of the copy has been borrowed from other websites as well as the dining and bar menus. The photos obviously are borrowed as well, because this hotel does not actually exist. Everything included is purely for demonstration purposes and no plagiarism is intended.