BIT608 Web programming

Assessments 1 – 3

The Motueka Bed & Breakfast Design Brief

Introduction

A retired couple, Mr. and Mrs. Hohepa, have a large, beautiful homestead near Motueka. They live by themselves and want to turn their large home into a "Bed and Breakfast" (B&B). The couple knew they would have to advertise their B&B to attract more Customers. Therefore, they have hired a web development company named "Simplicity Web Solutions" (SWS). SWS will create a website with information about their B&B and allow Customers to make an online reservation. SWS mainly focuses on the GUI design aspect of websites, not coding development, so SWS has contracted you, the developer, to assist their team.

Web application requirements – Customer facing

The main goal is to attract more regular Customers, so possible Customer-facing functional requirements include:

- viewing informational materials about the Motueka area
- viewing information about the room booking process
- viewing room details
- checking room availability
- making a room booking
- viewing an existing room booking
- updating an existing room booking
- purchasing gift vouchers
- finding the location of the B&B
- providing background information about the owners.

Web application requirements – Admin

The owners have requirements for the website administrator to manage rooms, Customers, and bookings. Possible admin functional requirements include:

- Adding a Customer*
- Editing a Customer*
- Listing all Customers
- Adding a room
- Deleting a room
- Updating existing room details

* These two requirements also apply to the Customers. Customers can add and edit their details.

Other requirements

- The owners prefer a cheaper development option in the long term due to their limited funds.
- They want some audio-visual content
- The owners are interested in marketing options (SEO and analytics) so that non-local visitors can find them.

Page views

The HTML page views in this section contain indicative mock data and do not indicate any required content.

- Each view shows the minimum requirements for the input and/or output components on each web form/page.

The page views shown here contain no design or formatting beyond simple HMTL. SWS will add a template to address the GUI and UX. The page views provide some guidance regarding what information is recorded by the web application without resorting to formal software development documentation.

There are two sections to each page view:

1. Those already provided in the partially completed example system
   (dealing with customers and rooms)

2. Those to develop as part of the assessment process
   (dealing with bookings)

Pages in the Partially Completed Example System

Homepage

The example of the B&B web application provided in the *student_bnb.zip* resource contains a simple index page (*index.php*). *Index.php* links to the other pages, and you can use it for testing. In the partial example, neither "Bookings listing" nor "Login" is implemented (these are part of the assessments).

BIT608 Web Programming

Assessment case study web application temporary launch page

- Original Template example
- Converted Template example
- Customer listing
- Rooms listing
- Bookings listing
- Login

Customer maintenance and registration page views

These page views are the minimum requirements for recording Customer information. They have no additional information such as address or contact details. You may add such information as required.

1. The **New Customer registration page** links from the Customer list page

New Customer Registration

[Return to the Customer listing][Return to the main page]

First name:

Last name:

Email:

Password:

Register

2. The **Customer list search by last name page** finds all matching Customers based on a search string. The new Customer registration page will link from here and the options to view, edit, or delete an existing Customer.

Customer List Search by Lastname

[Create new Customer][Return to main page]

Lastname: b

Last name	First name	Actions
Baldwin	Forrest	[view][edit][delete]
Burks	Barry	[view][edit][delete]

3. The **Customer details view page** is accessed from the Customer list view and displays the details of one specific Customer based on the Customer ID (primary key) as stored in the database

Customer Details View

[Return to the Customer listing][Return to the main page]

┌─ customer detail #4 ───

First name:
    Forrest
Last name:
    Baldwin
Email:
    eget.nisi.dictum@a.com

4. The **Customer Details Update page** links from the Customer list view and allows the Customer data to be updated. The form prepopulates with the existing Customer's data.

Customer Details Update

[Return to the Customer listing][Return to the main page]

First name: Forrest

Last name: Baldwin

Email: eget.nisi.dictum@a.com

Update

5. The **Customer details preview page** shows the selected Customer's details before deletion. The user then has the option to confirm the deletion or cancel.

Customer details preview before deletion

[Return to the Customer listing][Return to the main page]

Customer detail #4

First name:
Forrest
Last name:
Baldwin
Email:
eget.nisi.dictum@a.com

Are you sure you want to delete this customer?

Delete [Cancel]

The following is the minimum information required for maintaining the room information; there are currently ten rooms. You may insert a limit check in the code to prevent additional rooms from being added. There is no other information in these page models, such as room services and features, but you can include it if required.

The 'add' and 'delete' functions would rarely be required but may be needed to remove rooms temporarily for redecorating or the off-season.

1. The **Add a new room page** links from the rooms listing page.

Add a new room

[Return to the room listing][Return to the main page]

Room name: [   ]

Description: [   ]

Room type: ○ Single ● Double

Sleeps (1-5): [1]

[Add]

2. The **Room list page** includes all of the rooms and links to the add a room page.

Room list

[Add a room][Return to main page]

Room Name	Type	Action
Herman	D	[view][edit][delete]
Scarlett	D	[view][edit][delete]
Octavia	D	[view][edit][delete]
Gretchen	D	[view][edit][delete]
Dacey	D	[view][edit][delete]
Preston	D	[view][edit][delete]
Kellie	S	[view][edit][delete]
Jelani	S	[view][edit][delete]
Sonya	S	[view][edit][delete]
Miranda	S	[view][edit][delete]
Helen	S	[view][edit][delete]
Bernard	S	[view][edit][delete]
Dane	S	[view][edit][delete]
Cole	S	[view][edit][delete]

3. The **Room details view page** shows the details of a room with no input, linked from the room listing page.

4. The **Room details update page** allows the user to update the details of an existing room, linked from the room listing page.

5. The **Room details preview page** enables the user to confirm the details of a room to be deleted (before confirming deletion)

Room details preview before deletion

[Return to the Room listing][Return to the main page]

―Room detail #2―――――――――――――――――――

Room name:
    Herman
Description:
    Lorem ipsum dolor sit amet, consectetuer
Room type:
    D
Sleeps:
    5

Are you sure you want to delete this Room?
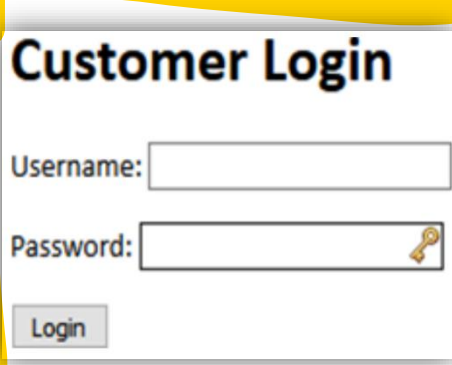
Delete [Cancel]

Pages to be added as part of the assessments

Room booking maintenance page views

The page views in this section are not yet implemented in the example system. You can use these as a guide for meeting the requirements of the assessments. All these views are related explicitly to the booking process.

The booking system pages provide some implementation challenges. They include references to the Customer and the room information from the admin pages previously described, which is then combined to create a room booking. Once again, the page views provided only present the minimum required information to manage bookings. You could choose to add additional details or components as needed.

1. The **Customer login page** is needed because Customers can only make a booking after logging in. Otherwise, redirect them to the **New Customer registration page**. The Customer login page also links from the home page. They can only log in if they have previously registered. All the following pages expect the Customer to have logged in. Otherwise, redirect the Customer to the login or registration page. Note that the username will be their email address, so there is no separate username required in the system

2. The **Make a booking page**

Make a booking

[Return to the Bookings listing][Return to the main page]

Booking for Test

Room (name,type,beds): Kellie, S, 5 ▼

Checkin date: yyyy-mm-dd

Checkout date: yyyy-mm-dd

Contact number: (###) ### ####

Booking extras:

Add [Cancel]

3. The **Current Bookings page** lists the current bookings. It does not currently include filtering by a Customer but instead lists all available bookings. You may add filtering by a Customer or by date period.

Current bookings

[Make a booking][Return to main page]

Booking (room, dates)	Customer	Action
Herman, 2022-10-10, 2022-12-10	Baldwin, Forrest	[view][edit][manage reviews][delete]
Sonya, 2022-07-01, 2022-07-20	Walker, Irene	[view][edit][manage reviews][delete]

4. The **edit a booking page** assumes the Customer has signed/logged in. It should take them to the login or registration page if they haven't. There is no filtering.

Edit a booking

[Return to the Bookings listing][Return to the main page]

Booking made for for Test

Room (name,type,beds): Herman, D, 5 ▾

Checkin date: 10/10/2022 📅

Checkout date: 10/12/2022 📅

Contact number: 021 555 5555

Booking extras:
```
none
```

Room review:
```
great
```

Update [Cancel]

5. The **Booking details view page** assumes the Customer has logged in. If they have not, redirect them to the login page. The view only shows the **minimum** information required for a booking. If the **Make a booking page** or **Edit a booking page** changes (e.g., by adding fields), this page should also be updated to reflect those changes.

Booking Details View

[Return to the booking listing][Return to the main page]

Room detail #2

Room name:
 Herman
Checkin date:
 2022-10-10
Checkout date:
 2022-12-10
Contact number:
 021 555 5555
Extras:
 none
Room review:
 great

6. The **Booking preview before deletion page** enables the user to confirm the deletion. Only the **booking** gets deleted it will not affect the **room** or the **Customer's** information. No checking is done to the dates to see if the booking is before the current date. An addition to the code could ensure that such a booking should not be available for deletion as the date period has already passed.

Booking preview before deletion

[Return to the booking listing][Return to the main page]

Booking detail #2

Room name:
 Herman
Checkin date:
 2022-10-10
Checkout date:
 2022-12-10

Are you sure you want to delete this Booking?

Delete [Cancel]

7. The **Edit/add room review** page can be used for either task. Only the booking contains the review, not the room itself. This means you can query through all the bookings to see the reviews for a particular room.

8. This revised **Make a booking page** works with a date picker that includes a date range. Making this change will be part of the assessments.

9. This version of the **make a booking page** extends the simpler version shown earlier to include a **Search Room Availability** option. The Customer determines if a room is available during a particular period. It should list all the rooms that are still available.

Make a booking

[Return to the Bookings listing][Return to the main page]

Booking for Test

Room (name,type,beds): Kellie, S, 5

Checkin date: 2022-10-30

Checkout date: 2022-07-05

Contact number: (###) ### ####

Booking extras:

Add [Cancel]

Search for room availability

Start date: 01/06/2022 End date: 25/06/2022 Search availability

Room #	Roomname	Room Type	Beds
1	Kellie	S	5
2	Herman	D	5
3	Scarlett	D	2
4	Jelani	S	2
5	Sonya	S	5
6	Miranda	S	4
7	Helen	S	2
8	Octavia	D	3
9	Gretchen	D	3
10	Bernard	S	5
11	Dacey	D	2
12	Preston	D	2
13	Dane	S	4
14	Cole	S	1