

TECHNICAL GUIDE

Guest House Management System

A Basic Structure of the Program:

We are greeted with three options on the first page: **Info**, **Login As User** and **Admin login**. We shall call it mainpage for now.

Clicking on **Info** will hide the most of what occupies the screen in the mainpage, and will open Panel1, which includes the map and some basic information. Clicking on **Back** will hide the panel and show all what's on the mainpage.

Clicking on **Login As User** will show the previously hidden panel which contains the usual login stuff, username and password. If the user clicks on **login** and the information entered is correct, which we check against the table `userinfo_table` our database, we'll hide the current form and open the `user_details` form, which is form2.

The information entered here will be checked individually, for instance, the validity of the name, validity of contact number. After this, we will open up a dummy payment window.

After 'confirming' we'll give the user the room number, the booking number, room type, the amount paid. The room number will be given in a loop, where the first unoccupied room will be allotted to the user.

If the information they entered is incorrect, we'll prompt them to enter the correct information. And if they already have a booking, they'll be reminded that one account can have at most one booking at a time.

If the user has a booking, we'll hide everything else and show Panel3 of mainpage ie Form1.

Here, **Show my details** will fetch the user's details from the userdetail_table in the database, and display it.

Checkout will remove the user from the database, but here is a little flaw in our program.

After checking out, the room would still show up occupied until the following day. If time were to be used too, it would be necessary to add this condition.

Finally, **Cancel Booking** will do what it says, and cancel the booking if the date is at least 5 days away and show a dummy message of reimbursement via Form9.

Clicking on **Admin login** will open up the admin login page, in a similar fashion of hide and show.

After checking the credentials against our database, we will allow the admin access. In the registereduser_details form, we have **Room details** which will look through the database and add all the occupied rooms in the time period between the **Start Date** and the **End Date** in one combo box, and all the unoccupied in the other.

Clicking on one of the occupied rooms will fetch all the details of that room.

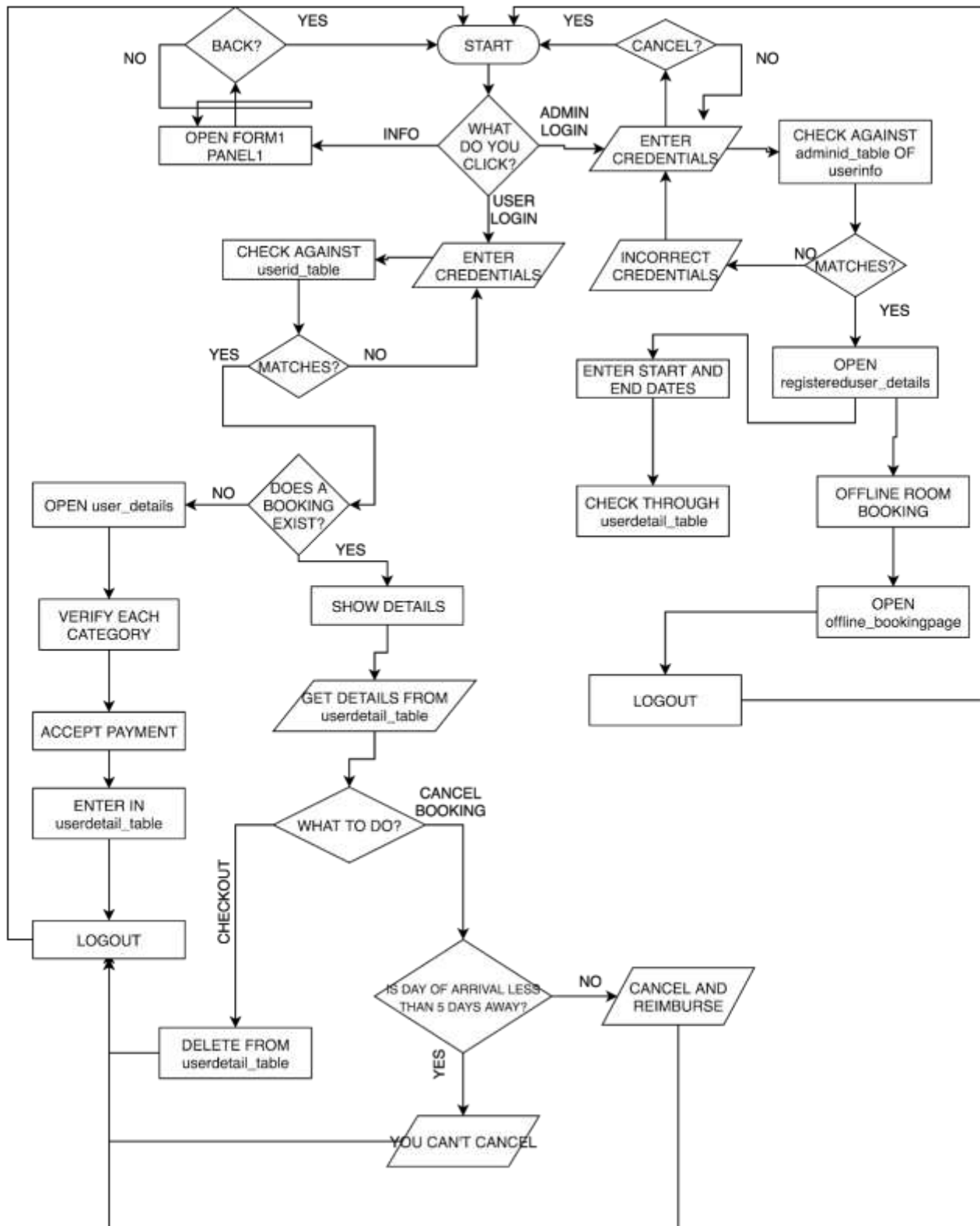
Logout will close that form and bring the admin back to the mainpage.

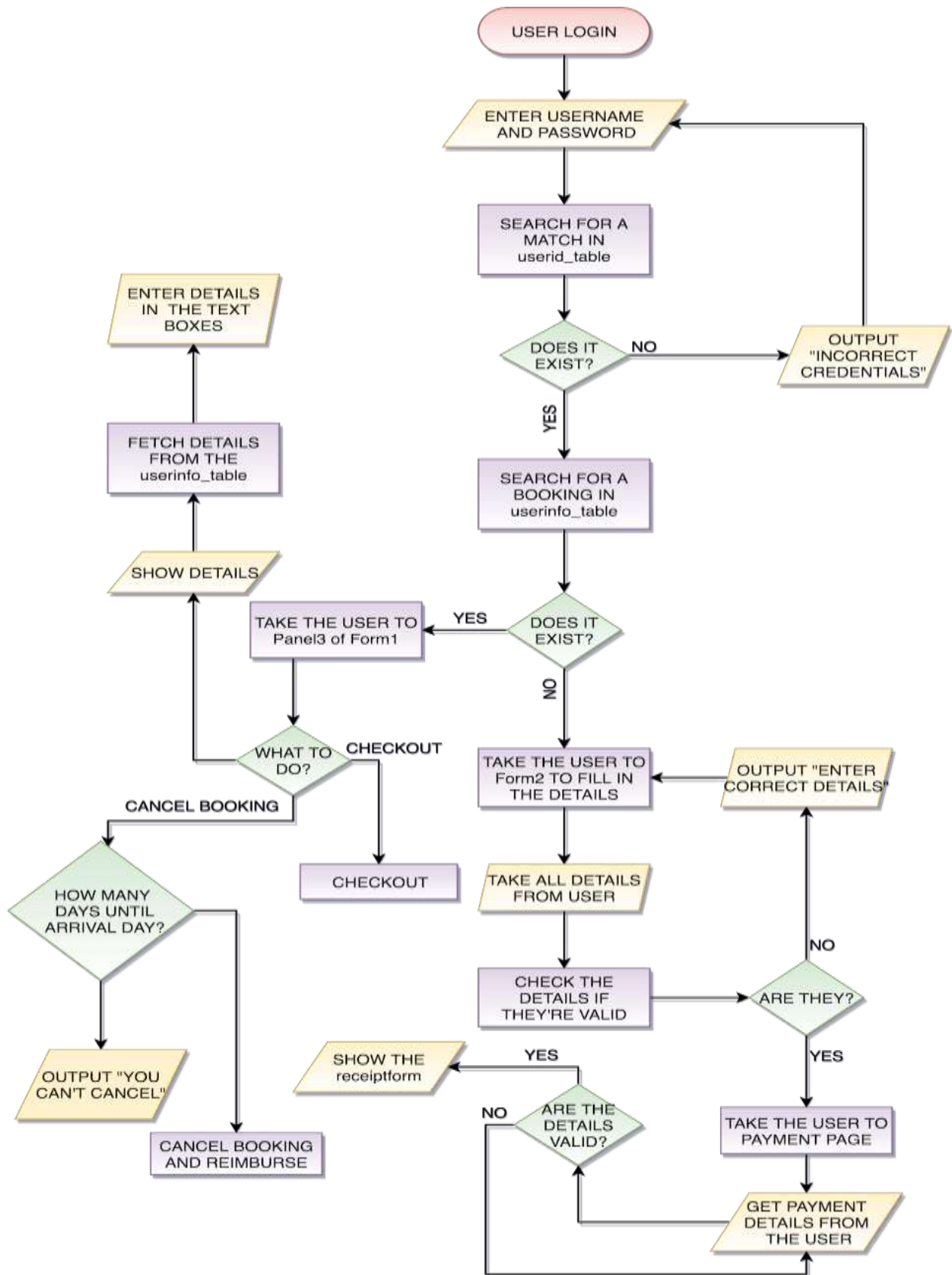
Offline Room Booking will take the admin to offlinebooking_page, which is much similar to an user's login page.

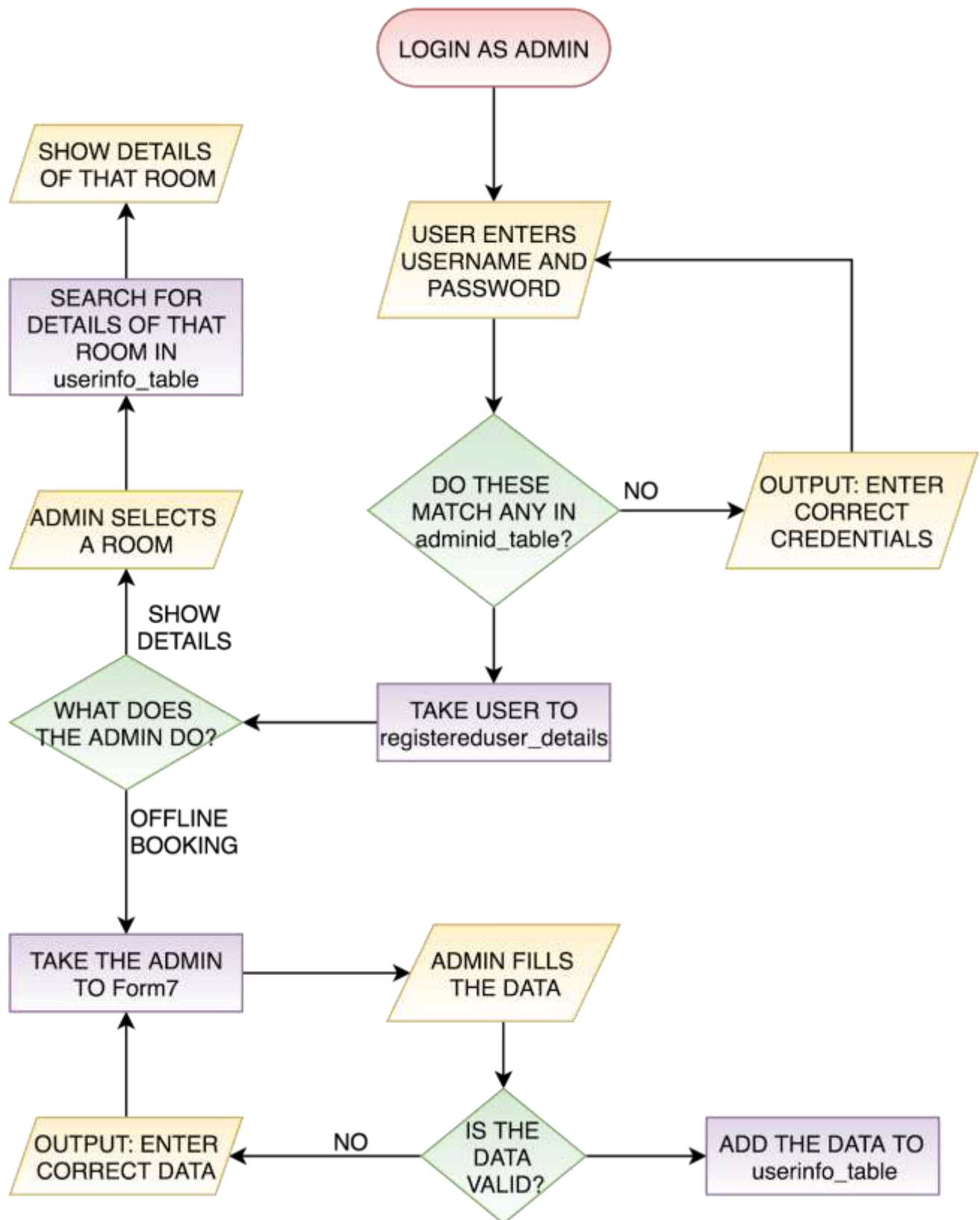
Functions we used in code:

- 1.Available_rooms** : use to count no of single rooms and double rooms in any particular date or between two dates select by user or admin
- 2.IsAlpha:**use to check constraint of name filled
- 3.IsNum:**use to check constraint on filled first date and second date

A Flowchart of the Logic:







The structure of the database:

The database is named as “userinfo” and contains 5 tables:

- adminid_table
- doubleroom_table
- singleroom_table
- userid_table
- userinfo_table

adminid_table contains two columns: **username** and **password**. The admin will login using these.

doubleroom_table contains two columns: **Room_No** and **Allotted**. If a room is occupied, the allotted for that room turns into 1, else it is 0.

Singleroom_table contains two columns: **Room_No** and **Allotted**. If a room is occupied, the allotted for that room turns into 1, else it is 0.

userid_table contains the (webmail) username and passwords for all the students, staff and professors. The price of staying is separate for these different categories. This table has three columns: **username**, **password** and **Category**.

userinfo_table contains the columns **Bookin_No**, **Name**, **Address**, **Contact_No**, **Purpose_of_visit**, **Arrival_Date**, **end_date**, **Room_type**, **Laundry**, **Cleaning**, **Webmail** and **Room_No**, each one is self-explanatory and all these are entered through Form2 or Form7.

All buttons/labels/textboxes on each form:

Form 1: The mainpage

Label3 is the heading that reads "IITG GUEST HOUSE"

Label6 reads "Welcome To IITG GUEST HOUSE"

Info_btn will open the Panel1

user_btn will open the Panel2, ie ask for username and password **admin_login_btn** will open the admin login form

Panel2 contains these:

Label8 reads "Guest Login"

Label1 reads "*username"

Label2 reads "*password"

Label7 reads "@iitg.ac.in"

CheckBox1 shows password if checked

username.txt takes in the username

password.txt takes in the password

login_btn sends you over to the userdetails form if your credentials match those in the **userid_table**

Panel1 contains the info about and a map of guesthouse

InfoBackButton will take the user back from Info.

RichTextBox1 has the written info about costs and services.

PictureBox1 has the map

In case you have a booking and your username and password are correct, you are directed to **Panel3**:

Label9 is the heading that reads "IITG GUEST HOUSE"

Label10 reads "Booking No"

Label11 reads "Room No"

Label12 reads "Date of Arrival"

Label13 reads "Date of Departure"

Label14 reads "Contact No"

Label15 reads "Room Type"

Label16 reads "Laundry"

Label17 reads "Cleaning"

details_btn will show all the details in the respective textboxes **checkout_btn** will check the user out, and the current day user departs that day will become his departure date, i.e. If user's departure date is 21-feb 2019 and he wants to depart on 19-feb 2019 then his departure date updates to 19-feb 2019 **booking_cancel_btn** will cancel the booking if the date of arrival is more than 5 days away from today

panel3backButton read "Logout" and log the user out and bring them to mainpage

Form2 (userdetails): will open when the user doesn't have a booking and has entered correct credentials. This form contains the details of the user for booking a room.

Label11 reads 'IITG GUEST HOUSE' in the heading.

Label1 reads '*Name'

Label2 reads '*Address'

Label3 reads '*Contact No'

Label6 reads '*Purpose of visit'

Label8 reads '*Date of Arrival'

Label7 reads '*Date of Departure'

Label4 reads '*Room type'

Label10 reads 'How many days do you want (in your stay duration)?'

Label5 reads '*Laundry'

Label9 reads '*Cleaning'

NightButton is the button that reads 'Night Mode' and clicking this will turn the background black

nametxt is the text box that will contain the name

addresstxt will contain the address **contacttxt**

will contain the contact number **purposetxt** will

contain the purpose of visit **datetxt** will contain

the date of arrival. This also has a

DateTimePicker format.

date2txt will contain the date of departure.

roomtype is the combo box that contains the type (single/double) of room

laundrytxt is a combo box that contains the number of days of laundry **cleaningtxt**

contains the number of days of cleaning

Button1 is the button which will show the number of available rooms **book_btn**

is the button reading 'Book Now' and will go to the payment form **cancel_btn**

will cancel whatever the user has written and bring them back

Form3 (registereduser_details): Is the page admin sees after successfully logging in.

Label1 is the heading that reads "IITG GUEST HOUSE" in red

Label7 reads 'Start Date' in red

Label12 reads 'End Date' in red

Label11 reads 'Select room from given box' and will be next to the combo box that shows all booked rooms. **Label13** reads 'Vacant Rooms'

Label15 reads 'Single'

Label16 reads 'Double'

Label4 reads 'Booking No'

Label5 reads 'Name'

Label6 reads 'Contact No'

Label2 reads 'Arrival Date'

Label3 reads 'Departure Date' **Label8**

reads 'Services'

Label9 reads 'Laundry (Days)'

Label10 reads 'Cleaning (Days)'

datetxt is the text box containing Start Date

date2txt contains End Date

ComboBox1 contains all booked rooms

ComboBox2 contains all unoccupied rooms

singletxt contains number of unoccupied single rooms **doubletxt**

contains number of unoccupied double rooms

booking_notxt contains the booking number of the occupant of the selected occupied room

nametxt contains the name of the occupant **contacttxt**

contains the contact number for the occupant **date_txt**

contains the arrival date of the occupant **date2_txt**

contains the departure date of the occupant

laundrytxt contains the number of days the occupant chose to avail the laundry service

cleaningtxt contains the number of days the occupant chose to avail the cleaning service

Button1 reads “Room Details” and clicking this will show all the detail related labels and boxes

Button2 reads “Offline Room Booking” and will open the offline booking form **Button3** reads “Logout” and does exactly that

Form 4 (adminpage): here admins log in

Label1 is the heading “IITG GUEST HOUSE”

Label4 is the secondary heading “ADMIN LOGIN”

Label2 reads “*username”

Label3 reads “*password”

username.txt is the text box that’ll contain username **password.txt**

is the text box that’ll contain password

CheckBox1 is a check box which will show the password if checked and won’t if not

LOGIN_btn will login the admin if the username and password match in the adminid_table and take the admin to registereduser_details, which is Form3.

back_btn will open the mainpage

Form5 (paymentform): pay here after filling the form.

Label1 is the heading that reads "IITG GUEST HOUSE"

Label2 is the secondary heading that reads "Your registration details" in yellow

Label3 reads "Registered name"

Label5 reads "Registered mobile no"

Label6 reads "Your arrival Date"

Label17 reads "Your departure Date"

Label14 reads "Webmail"

Label13 reads "Room type"

Label7 reads "Your amount Rs"

Label8 is the secondary heading that reads "Payment" in yellow

Label9 reads "*Bank Name"

Label10 reads "*Debit Card No"

Label11 reads "*Expiry"

Label16 reads "MM"

Label15 reads "YY"

Label12 reads "*CVV"

nametxt shows the registered name

contacttxt shows the registered mobile number

datetxt shows the registered date of arrival

date2txt shows the registered date of departure

webmailtxt shows the registered webmail

roomtype shows the registered room type

amounttxt shows the amount the user has to pay

bankcombobox has a few banks to choose which bank the card is from

debittxt is where you enter your debit card number

mmcombobox and **ddcombobox** is where you choose the expiry month and year respectively (note ddcombobox refers to year, not day) **CVVtxt** is where cvv is entered, and will always remain hidden

Button1 will tell you that CVV is the three digit number on the back of your card

verify_btn will verify your details **confirm_btn** will confirm your payment

cancel_btn will cancel your payment and you'll be asked whether to remain on the same page or go back. This will delete any saved info.

Form6 (receiptform): contains your room no and booking no

Label1 is the heading that reads "IITG GUEST HOUSE"

Label2 is the subheading that reads "Room details"

Label7 reads "Name"

Label3 reads "Room no"

Label4 reads "Booking no"

Label5 reads "Room type"

Label8 reads "Amount paid Rs"

Label6 reads "Thank You for Booking"

TextBox2 will show you the name **room_notxt**

will show the the room number **booking_notxt**

will show the booking number **roomtype**

shows the room type (single/double)

TextBox1 shows the amount you paid

logout_btn logs you out

Form7 (offline_bookingpage): admin can book rooms offline too

Label1 is the heading that reads "IITG GUEST HOUSE"

Label2 reads "*Name"

Label3 reads "*Address"

Label4 reads "*Contact No"

Label5 reads "*Purpose of Visit"

Label6 reads "*Date of arrival"

Label7 reads "*Date of Departure"

Label8 reads "*Room Type"

Label9 reads "*Webmail"

Label11 reads "No of days the following services taken"

Label12 reads "*Laundry"

Label13 reads "*Cleaning"

DateTimePicker1 is always hidden and has today's date

nametxt will have the name **addresstxt** will contain

the address **contacttxt** will contain the contact

number **purposetxt** will contain the purpose of visit

datetxt will contain the arrival date **date2txt** will

contain the date of departure **roomtype** will contain

the type of room (single/double) **webmailtxt** will

contain the webmail of the user

Laundrytxt will contain the number of days the user plans to avail the laundry services

cleaningtxt will contain the number of days the user plans to avail the cleaning services

Button1 shows the number of available rooms

book_btn will book the room **Back**

will take the admin back

Form8: will show change password page, it updates the password of user

Form9: will show after cancellation

Label1 will read "Booking canceled" in red

Label2 will read "your Booking Payment"

Label6 will read "Rs"

Label7 will have the amount which we have calculated earlier during payment.

Label4 will read "will be returned in 2 days"

Label5 will read "Thank you"

Button1 says OK

Problems:

1. If admin wants to view the details of a certain room within a span of a few days and the room has multiple bookings within that time, he won't be able to see all the bookings. If he wants to see the details of a certain day, he has to select the start date and the end date the same, which is the day he wants to see the details of.
2. You can cancel the booking only until five days before the day of arrival.
3. If the user checks out before the date of departure, we cannot reimburse them through the software.

Hope this guide was useful for you. If you encounter a problem, we will be glad to help you:

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