Chapter 6

TESTING

6.1 Testing

Software testing is conducted to provide stakeholders with information about the quality of the software product or service under test. Software testing can also provide an objective, independent view of the software to allow the business to appreciate and understand the risks of software implementation.

6.1.1 Unit testing

Unit testing is a software testing method by which individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures, and operating procedures, are tested to determine whether they are fit for use. The below table 6.1 refers to unit test case for admin login.

Table 6.1 Unit test case for Admin Login

Sl No. of test case:	1
Name of test:	Login check
Item / Feature being tested:	Login
Sample Input:	Enter username and password fields and click on Submit button.
Expected output:	Message 'user registered successfully' is displayed.
Actual output:	Message 'user registered successfully' is displayed.
Remarks:	Test succeeded

The admin is initially asked to log in to make further functioning of the website. Admin can change or edit the information only after logging into the Admin side portal. There's only one admin for the website.

The below figure 6.1 shows the login page for the Admin. The login page validates with using valid username and password.

Figure 6.1 Admin Login

6.1.2 Integration testing

Integration testing is the phase in software testing in which individual software modules are combined and tested as a group. It occurs after unit testing and before validation testing

Table 6.2 Integration test case to Reserve room.

Sl No. of test case:	1
Name of test:	Reserve room
Item / Feature being tested:	Room Reservations
Sample Input:	Enter the Name, check-in date, check-out date.phone no, people , email address
Expected output:	Message 'Reservation Successfully made' is displayed.
Actual output:	Message 'Reservation successfully made' is displayed.
Remarks:	Test succeeded

Figure 6.2 Room Registration.

The figure 6.2 shows snapshots of users booking a room the users views the hotel and reserves using his credentials. Once the credentials are matched, he will be shown a message that the hotel is reserved successfully.

Table 6.3 Integration test case for incorrect credentials

Sl No. of test case:	2
Name of test:	Reserve Room
Item / Feature being tested:	Room Reservation
Sample Input:	Enter incorrect value for Check-in date.
Expected output:	Message 'Invalid check-in date is provided' is displayed.
Actual output:	Message 'Invalid check-in date is provided' is displayed.
Remarks:	Test succeeded

Once user tries to reserve a room and while reserving if the user gives a wrong check-in date, then there's validation for date as user enters invalid date .as shown in figure 6.5

Invalid Check-in date provided. Please avoid using a past date.
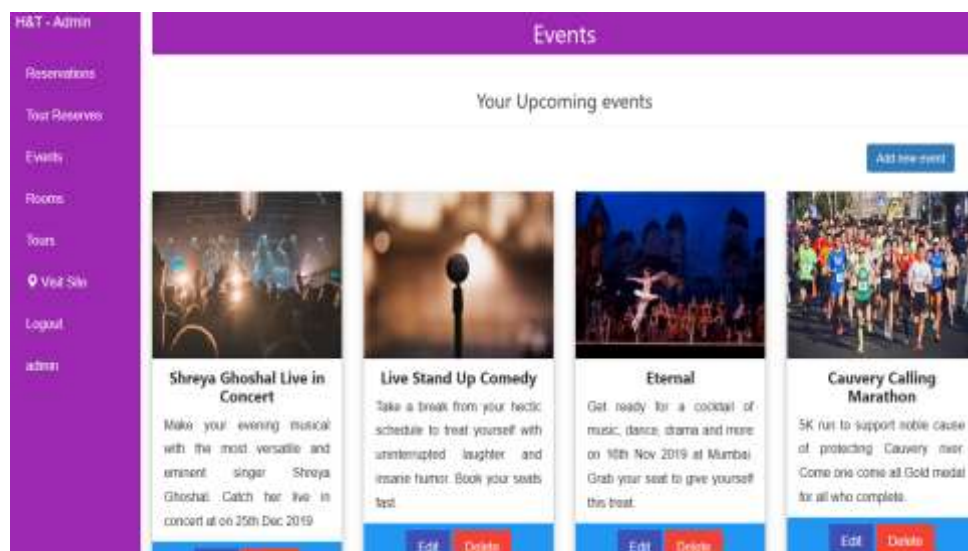
Figure 6.3 Invalid Credentials.

6.1.3 System testing

System testing is testing conducted on a complete integrated system to evaluate the system's compliance with its specified requirements.

Table 6.4 System test case for checking the user reservations in admin side portal

Sl No. of test case:	1
Name of test:	Status of the Reservation
Items / Features being tested:	User filing reservation, Information will be saved in the database.
Sample Input:	Login to valid admin account.
Expected output:	User information entered for the hotel will be shown in the admin side portal with all details.
Actual output:	User information entered for the hotel will be shown in the admin side portal with all details is Shown.
Remarks:	Test succeeded.

The table 6.4 shows system testing for Admin Portal. This test case checks to see how room reservation is done.

Figure 6.4 Admin Home page

Once the admin clicks for Hotel Reservation option, here we can view the complete reservations user made. Multiple users have reserved multiple rooms all the reservations will be shown in this portal. This is displayed below in the figure 6.5.

Room Reservations

#	Name	Room Number	Checkin	Checkout	Phone	# of People	Email	Action
1	Tul	Inter-Continental Hotel	2017-12-16	2017-12-26	0976245430	2	tembothulani@gmail.com	■
2	ketaki	Victoria Falls Hotel	2020-01-20	2020-01-29	1234567893	2	ket@gmail.com	■

Figure 6.5 Hotel Reservations