

VERSION HISTORY

| Version | Implemented | Revision | | |
|---------|-------------|------------|--|--|
| # | Ву | Date | | |
| 1.0 | 5 | 04/03/2016 | | |
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1.0 INTRODUCTION

1.1 PURPOSE

This Guest House Management System Test Report provides a summary of the results of test performed as outlined within this document.

2.0 TEST PLAN

In the first phase of the testing we tested each web page and the tables in the database individually.

In the second phase we tested the consistency between database and user input data. We also tested interrelation between the web pages.

In the third phase we tested the system as a whole i.e System testing and then we did performance testing mostly related to database usage.

3.0 TEST ASSESSMENT

We went accordingly to our test plan and we found most mistakes in User Interface Design during module testing. In interface testing we tested whether the one web page is directing the user to other required web page or not. We did the System testing according to its behavior with web browser and on the basis of some security related issues. User Acceptance Testing is done by checking the user functionalities mentioned in the SRS document.

We were unable to check some performance related issues like CPU utilization, speed, traffic on the web application because system is made to run on local host.

We did not test the application according to different hardware requirements.

4.0 TEST RESULTS

Most of the errors were related to the invalidity of Input and un-notified scenarios during user actions. It was expected to validate all the required fields and notify any error or successful message to the user.

Database is inconsistent with user input in some cases and the major defect is with the inappropriate assignment of primary key. It was expected to have some relationship between different tables in database.

Some user requirements were not fulfilled in the system like - billing system not designed. Insufficient details are available to admin and therefore he is unable to make decision about acceptance of the user booking request.

4.1 UNIT/MODULE/SYSTEM TESTING

Unit, module, and system integration testing activities were performed during the development of the system build or release.

4.2 SYSTEM TESTING

The table below summarizes the results of system testing:

| Test Case ID | Date Tested | Tester | Pass/ Fail | Severity of Defect [Low/ Medium/ High] | Summary of Defect | Closed prior to Produc tion Release | Comments |
|-----------------|----------------|---------|---------------|--|--|---|--|
| 1 | 4/3/2016 | Dishant | Fail | High | Inconsistency with Web Browser | Yes | Need to login again in another browser Tab after first login is done |
| 2 | 4/3/2016 | Shiv | Fail | Low | Admin Login Web Page is not linked with main Web Application | Not required | |
| 3 | 4/3/2016 | Shiv | Pass | | | | Logout functionality for all type of users is working fine |
| 4 | 4/3/2016 | Shiv | Fail | Medium | Primary Key is not Appropriately used in database therefore causing errors during manipulation of data | Id is used because of auto increment option | ID is defined as primary key for each table instead of "Username" field |
| 5 | 4/3/2016 | Arvind | Pass | | | | On refreshing the Web page the after the login system is retaining its original state of Login |
| 6 | 4/3/2016 | Dishant | Fail | High | Billing System is not Developed | Yes | |
| 7 | 4/3/2016 | Ramkesh | Fail | High | The system can be crashed easily using Cross Site Scripting | Yes | No validation on Input so any SQL command can run in database without Authentication |
| 8 | 4/3/2016 | Ramkesh | Fail | High | Normal user can access the Admin | Yes | |

| | | | | data Authentica using Hijacking | without ation Session | |
|---|----------|---------|------|--|-----------------------------|---------------|
| 9 | 4/3/2016 | Ramkesh | Pass | | | SQL Injection |

4.3 USER ACCEPTANCE TESTING

The table below summarizes the test cases employed for user acceptance testing and the test results obtained for each test case:

| | | 1 | | | | | |
|--------------------|----------------|---------|---------------|---|--|---|---|
| Test Case ID | Date Tested | Tester | Pass /Fail | Severity of Defect [Low/ Medium/ High] | Summary of Defect | Closed prior to Produc tion Release | Comments |
| 1 | 4/3/2016 | Shiv | Fail | Medium | Admin unable to see number of beds | Yes | |
| 2 | 4/3/2016 | Arvind | Fail | Low | Format of Govt Id is not specified in the Booking form | | |
| 3 | 4/3/2016 | Dishant | Pass | | | | Admin is able manipulate the data like no. of Rooms and accept the Booking request of the user. |
| 4 | 4/3/2016 | Shiv | Fail | Medium | User Type is not defined to the Admin | Yes | Showing User Type as Numeric values. Should be "Registered User" and "Guest User" |
| 5 | 4/3/2016 | Arvind | Pass | | | | A registered member is able to log in into the system |
| 6 | 4/3/2016 | Shiv | Fail | Low | Room Type is not descriptive | Yes | Room Type is Mentioned as A,B,C,D |
| 7 | 4/3/2016 | Ramkesh | Fail | Medium | User require two more field for – | Not specified | |

| | | | | | "Deluxe Ac" and "Deluxe NonAc" but not specified | in the SRS | |
|----|----------|---------|------|------|--|--------------|--|
| 8 | 4/3/2016 | Shiv | Pass | | | | Registered and Guest user is able to make the request for the Booking of the room |
| 9 | 4/3/2016 | Dishant | Fail | High | "Guest User" and "Registered User" is unable to know whether his request to allocate room is being Accepted or Rejected by Admin | According to | |
| 10 | 4/3/2016 | Dishant | Fail | High | Any User is unable to view the Price and bill accordingly | | |

4.4 REGRESSION TESTING

The table below summarizes the test cases employed for regression testing and the test results obtained for each test case:

| Test Case ID | Date Tested | Tester | Pass/Fail | Severity of Defect[Low/ Medium/ High] | , | | Comments |
|--------------------|----------------|--------|-----------|---------------------------------------|---|--------------------------|----------|
| | | | | | | <yes> or <no></no></yes> | |

4.5 PERFORMANCE TESTING

The table below summarizes the test cases employed for performance testing and the test results obtained for each test case:

| Test Case ID | Date Tested | Tester | Pass/ Fail | Severity of Defect[L ow/ Medium/ High] | Summary of Defect | Closed prior to Productio n Release | Comments |
|--------------------|----------------|---------|---------------|--|---|--|--|
| 1 | 4/3/2016 | Ramkesh | Fail | | Guest user table is containing 18 columns | | Manipulating data on such large tables can decrease the performance. Instead one should have used multiple tables so that manipulation is done accordingly |
| 2 | 4/3/2016 | Shiv | Fail | | No relation between the different tables in database | | Scalability reduces because while adding new functionalities requires interrelations between tables |

4.6 MODULE TESTING

The table below summarizes the test cases employed and the test results obtained for each test case:

Table 4.6.1 - Guest Accommodation Booking Form Test Table – (Module Testing)

| Test Case ID | Date Tested | Tester | Pass/ Fail | Severity of Defect[L ow/ Medium/ High] | Summary of Defect | Closed prior to Producti on Release | Comments |
|-----------------|----------------|---------|---------------|--|-----------------------------------|---|---|
| 1 | 4/1/2016 | Ramkesh | Fail | Low | Phone Number field–no constraints | Yes | It should hold only numeric values up to 10 digits only |

| 2 | 4/1/2016 | Shiv | Fail | Low | No constraints on Age | Yes | It should hold only positive values |
|----|----------|---------|------|--------|--|----------------------------|--|
| 3 | 4/1/2016 | Shiv | Pass | | | | Entry and exit dates are constrained to required values |
| 4 | 4/1/2016 | Dishant | Fail | Low | Entry Date > Exit Date Allowed | Yes | Exit Dates must be greater than Entry date |
| 5 | 4/1/2016 | Arvind | Fail | Low | No Constraints on Email ID | Yes | Should follow criteria like – example@gmail.com |
| 6 | 4/1/2016 | Shiv | Fail | Low | No Auto fill , Autofocus Capability | | It should retain the values after page reload |
| 7 | 4/1/2016 | Ramkesh | Pass | | | | Showing Appropriate Notifications on submission of form in Guest Accommodation Booking WebPage |
| 8 | 4/1/2016 | Arvind | Fail | Medium | Purpose Field not mentioned in database | Yes | Admin unable to make use of it |
| 9 | 4/1/2016 | Shiv | Pass | | | | Submit field is OK |
| 10 | 4/1/2016 | Shiv | Fail | Medium | Arbitrary number appearing after form submission | Yes,Was not a defect | Registered – User form submission |
| 11 | 4/1/2016 | Arvind | Pass | | | | Name field – Ok |
| 12 | 4/1/2016 | Dishant | Fail | Medium | No limit on any of the fields in the form | Yes | If data exceed the 255 characters limit then some data is getting lost |
| 13 | 4/1/1016 | Ramkesh | Fail | Low | No. of rooms – no constraints on type of data | Yes | It should contain positive numeric value |
| 14 | 4/1/2016 | Shiv | Pass | | | | No. of Beds - Containing positive numeric value |
| 15 | 4/1/2016 | Arvind | Pass | | | | Select List feature working fine for Internet, Gender, AC or NON AC |
| 16 | 4/1/2016 | Arvind | Pass | | | | Log out field is OK |

| 17 | 4/1/2016 | Shiv | Fail | Low | Unnecessary Relationship field in Guest User Form | Yes, New table created in the databas e | Relation status with which person. |
|----|----------|---------|------|-----|---|---|--|
| 18 | 4/1/2016 | Dishant | Fail | Low | Wrong spelling – "Accomodation" | Yes | It should be – "Accommodation" |
| 19 | 4/1/2016 | Dishant | Fail | Low | "Law of line" – Gestalt Error after 'Your details' heading | | In Guest User Accommodation Booking Form |
| 20 | 4/1/2016 | Ramkesh | Fail | Low | No Notification about wrong input by the user | Yes, Solved by popups | |

[If the test case failed, list the corresponding Test Incident ID in the Comments column.]

Table 4.6.2 – Login and Signup Web Page Test Table - (Module Testing)

| est ase ID | Date Tested | Tester | Pass /Fail | Severity of Defect[L ow/ Medium/ High] | Summary of Defect | Closed prior to Producti on Release | Comments |
|---------------|----------------|---------|---------------|--|--|--|--|
| 1 | 4/2/2016 | Shiv | Fail | High | Multiple users with same username ID allowed | User id can be same but distincti on is possible | |
| 2 | 4/2/2016 | Ramkesh | Fail | High | No encryption of User Password in | | Password should be encrypted using MD5 |

| | | | | | the database | | encryption function |
|----|----------|---------|------|--------|---|-----|---|
| 3 | 4/2/2016 | Arvind | Fail | High | After Login no information about registered user is used | Yes | |
| 4 | 4/2/2016 | Arvind | Fail | Low | No notification displayed after login complete | Yes | |
| 5 | 4/2/2016 | Shiv | Fail | Low | No notifications on invalid input by the user | Yes | |
| 6 | 4/2/2016 | Ramkesh | Pass | | | | Duplicate Phone no. and Email-ID detected |
| 7 | 4/2/2016 | Shiv | Fail | High | Signup successful without taking Userld, password, Name, and various other fields | | Should mention about the mandatory fields to be filled in the signup form |
| 8 | 4/2/2016 | Shiv | Fail | Low | No constraints on Phone number field | Yes | It should hold only +ve numeric values upto 10 digits only |
| 9 | 4/2/2016 | Ramkesh | Pass | | | | Gender/Sex field working fine |
| 10 | 4/2/2016 | Arvind | Fail | Low | Constraints on E- mail Id like '.com' not followed | Yes | |
| 11 | 4/2/2016 | Dishant | Fail | Medium | No data limit on any of the fields in the form | Yes | If data exceed the 255 characters limit then some data is getting lost |
| 12 | 4/2/2016 | Dishant | Fail | Low | Unexpected behavior of Address expansion utility | | |

Table 4.6.3 – Home Web Page Test Table - (Module Testing)

| Test | Date Tested | Tester | Pass/ | Severity | Summary of Defect | Closed | Comments |
|---------|-------------|--------|-------|----------|-------------------|----------|----------|
| Case ID | | | Fail | of | | prior to | |
| | | | | Defect[L | | Producti | |

| | | | | ow/ Medium/ High] | | on Release | |
|---|----------|--------|------|-------------------------|---|-----------------|---|
| 1 | 4/2/2016 | Shiv | Fail | Low | Not Responsive – Side Slider menu button not in use | | Unexpected Behavior on changing the window size |
| 2 | 4/2/2016 | Arvind | Fail | | No link for Admin Login on the page | Not required | |
| 3 | 4/2/2016 | Shiv | Pass | | | | Google Map API is working fine |

Table 4.6.4 – Database Test Table - (Module Testing)

| Test Case ID | Date Tested | Tester | Pass/ Fail | Severity of Defect[L ow/ Medium/ High] | Summary of Defect | Closed prior to Producti on Release | Comments |
|-----------------|----------------|---------|---------------|--|--|---|---|
| 1 | 4/2/2016 | Ramkesh | Fail | Low | No use made of "Idap_Id" field in guest_user Database | | |
| 2 | 4/2/2016 | Arvind | Fail | Low | No "purpose" field in Database | Yes | "purpose" is taken as input from the user will submitting the form |
| 3 | 4/2/2016 | Arvind | Pass | | | | On acceptance of Booking by Admin the required changes in database are successfully made |
| 4 | 4/2/2016 | Shiv | Fail | Medium | Primary key is not properly defined | Yes | In Registered User Table "user_id" should be used as primary key |
| 5 | 4/2/2016 | Dishant | Fail | Low | Updated_Date is unnecessary field | Yes | |
| 6 | 4/2/2016 | Dishant | Fail | Medium | Address data for Registered User not updated in | Yes | No relation carried between the tables |

| | | | | guest_user database on form submission | | | | |
|---|----------|------|------|--|-------------|---|------------|--|
| 7 | 4/2/2016 | Shiv | Pass | | are data | fields nitted in successfu base ationship | ılly store | |

Table 4.6.5 – Admin Web Page Test Table - (Module Testing)

| Test Case ID | Date Tested | Tester | Pass/ Fail | Severity of Defect[L ow/ Medium/ High] | Summary of Defect | Closed prior to Producti on Release | Comments |
|-----------------|----------------|---------|---------------|--|--|---|------------------------------|
| 1 | 4/2/2016 | Arvind | Fail | Low | No notification displayed after login complete | | |
| 2 | 4/2/2016 | Shiv | Fail | Low | Unrelated Glyph icon used in Admin_start.php file | | |
| 3 | 4/2/2016 | Arvind | Fail | Medium | Accepting –ve number of rooms | Yes, Now only +ve is possiibl e | |
| 4 | 4/2/2016 | Dishant | Fail | Low | For Registered User using Govt. Id as his name | | |
| 5 | 4/2/2016 | Ramkesh | Fail | High | Rejection Mail link is not working | Yes | |
| 6 | 4/2/2016 | Ramkesh | Pass | | | | "Logout" button Working fine |
| 7 | 4/2/2016 | Shiv | Fail | Low | Unrelated Title Name("Responsive Table")of the | | |

| | | | | | Admin_see_request .php used | | |
|----|----------|---------|------|--------|---|-----|---|
| 8 | 4/2/2016 | Dishant | Pass | | | | "Add Rooms" button is working fine in Admin_see_request.php |
| 9 | 4/2/2016 | Dishant | Fail | Low | Unrelated Glyph icon used in Admin_see_request .php file | | |
| 10 | 4/2/2016 | Shiv | Fail | Medium | On accepting the Room Allotment Request, the no. of rooms availability may get negative | | |
| 11 | 4/2/2016 | Arvind | Pass | | | | Select Type List is working fine in adding_room.php |
| 12 | 4/2/2016 | Arvind | Fail | Medium | Also Accepting the Room request when not Available | Yes | |
| 13 | 4/2/2016 | Ramkesh | Pass | | | | "Submit" button is OK in adding_room.php |
| 14 | 4/2/2016 | Shiv | Pass | | | | "Logout" button is OK in adding_room.php |

Table 4.6.4– Test table for Consistency of Database with input and consistency between different Web Pages (Interface Testing).

| Test Case ID | Date Tested | Tester | Pass/ Fail | Severity of Defect[L ow/ Medium/ High] | Summary of Defect | Closed prior to Producti on Release | Comments |
|-----------------|----------------|--------|---------------|--|-------------------|---|--|
| 1 | 4/3/2016 | Shiv | Pass | | | | "Institute Member" button on Home Page is taking to Registered User Login Page - OK |

| 2 | 4/2/2016 | Dishant | Fail | Medium | Email Id link – guesthouse@iitj.ac. in is not working | | Request Should be followed "mailto" window |
|----|----------|---------|------|--------|--|----------------|---|
| 3 | 4/2/2016 | Arvind | Pass | | | | "Guest User" button on Home page is taking the user to Guest Accommodation Booking Page |
| 4 | 4/2/2016 | Arvind | Pass | | | | "Learn More" button on home page is taking user to required page |
| 5 | 4/2/2016 | Shiv | Fail | Medium | Relationship data not going into the database | Yes | Admin unable to make use of it |
| 6 | 4/2/2016 | Ramkesh | Pass | | | | "Login" button is taking user to Registered User Accommodation booking form |
| 7 | 4/2/2016 | Shiv | Pass | | | | "SignUp" button on Registered User page is taking the user to Sign Up page |
| 8 | 4/2/2016 | Dishant | Pass | | | | "Sign Up" button on Sign Up page is taking Registered user to Login Page |
| 9 | 4/2/2016 | Shiv | Pass | | | | "Add Rooms" button is working fine in Admin_see_request.php |
| 10 | 4/2/2016 | Shiv | Fail | Low | "Submit" button on Registered User Accommodation Booking is directing to the unexpected Webpage | Yes | |
| 11 | 4/2/2016 | Ramkesh | Pass | | | | "Log out" taking back to Login Webpage |
| 12 | 4/2/2016 | Dishant | Fail | Low | On giving Inappropriate Input | Yes,solv ed | Example – "abc" in input and storing o in database |

| | | | | in No. of rooms field the changes are going into database | |
|----|----------|---------|------|---|--|
| 13 | 4/2/2016 | Arvind | Pass | | "Submit" button in Guest User accommodation Booking page is redirecting to the same page with appropriate Message. |
| 14 | 4/2/2016 | Shiv | Pass | | Need to login again in another browser Tab after first login is done |
| 15 | 4/2/2016 | Dishant | Pass | | "Logout" button is OK in adding_room.php |

5.0 VARIANCES

During secondary phases of the testing we were getting some primary errors that were not tested before which was not expected according to the test plan. Also some modules were tested only after other modules were tested before it.

Operational Environment will involve connectivity to the Internet and therefore the number of user accessing the application may be large which can lead to errors and loss of data. We have tested the application on local host only so we are unable to test load limit of the application.

On connection with the web, the application may be prone to severe security issues that were not tested by us.

6.0 TEST INSTANCES

Random number was getting displayed after the submission of Registered User's Accommodation Booking form.

On adding too much of the data in purpose field of the Booking form, the unexpected web page was getting displayed with some warnings.

On minimizing the browser window of Home page unexpected side Slider menu button was getting displayed.

6.1 RESOLVED TEST INCIDENTS

- Sid1) Now the system is consistent with the web browser i.e if a user is logged in in a tab and opens the website in other tab there is no need for him to login again.
- Sid2) There is no need for linking the admin login page with the main user page as the tow are not interdependent.

UM1) All the errors related to user interface i.e invalid entries in fields like phone number, email id, entry date should be less than exit date and age should not be less than o are all corrected.

6.2 UNRESOLVED TEST INCIDENTS

7.0 RECOMMENDATIONS

All input data by the user should be validated by the application before submission. Make the database consistent with the input data. Use relations between the tables and make appropriate use of primary key, foreign key and candidate key. Give special attention to security issues like password encryption, multiple user login and Session Hijacking etc. Link all web pages through the main Application for example – Include Admin web page link on main home page.

APPENDIX A: REFERENCES

The following table summarizes the documents referenced in this document.

| Document Name | Version | Description |
|-------------------------------------|-------------------------------|---|
| <document Name></document | <version number=""></version> | [Provide brief description of the document] |

APPENDIX B: KEY TERMS

The following table provides definitions for terms relevant to this document.

| Term | Definition |
|----------------------------|---|
| Registered user | A student, staff or faculty |
| Admin | A person having access of guest house Database |
| Side Slider Menu Button | A menu toggle used to display navigation bar content on small window size. |
| Guest User | Any person with authenticated Govt. Id |
| Primary Key | That field in the database table to uniquely identify the tuple. |
| Glyph icon | precisely prepared monochromatic icons and symbols |
| MD5 Encryption | Function to encrypt the user password |
| Gestalt Principles | Principles that defines the visual nature of the structure of text and images |
| SQL Injection | Code injection technique, used to attack data-driven applications, in which malicious SQL statements are inserted into an entry field for execution |
| Cross-Site Scripting | Enables attackers to inject client-side scripts into web pages viewed by other users |
| Session Hijacking | To gain unauthorized access to information or services in a computer system. |