*Online Travel Booking System*

**Objective:**

The main objective of our online Travel Booking system is to provide an easy way to booking travel policy.

* This system is basically aimed to provide the customer, the complete information of the Travel, which policy can a customer can book travel for his/her family or self.
* Then he gets an intimation SMS as he booked travel.
* The goals of our system are

1. To provide service for the customer at anytime and anyplace through online and intimated through SMS.
2. To save the time.

**Scope of Testing:**

In this we are going to discuss the following

* Create a user Account.
* Login
* Search
* Policy Availability.
* Payment Gateway.

**PROJECT MODULES:**

**Login Modules:**

This module is for both type of user (customer and admin). In this modules according to the type of user (customer or admin) the further links and operations will be provided.

**Customer modules:**

As soon a visitor registers himself as a customer, the customer can now book travel and pay for them online.

**Booking Module:**

In this module travel booking policy will be booked by a customer. This module contains all the information regarding the availability of travel booking and hotel booking . As soon as the customer confirmed his/her respective booking(s), then he will get a Confirmation through SMS or Mail.

**Payment Module:**

This is the most important module because it deals with the payment of the booking by customer. The user can pay for the booking (s) through online banking or credit/debit cards and the booking details will be sent to respective user after successful payment.

**Search Module:**

In this module the user can search different hotels and different vechiles and different location .

**Testing Approach:**

Non Functional Testing:

It consist of following parameters

**Reliability**: The system will consistently perform its intended function.

Eg: The user information must be validated with his mobile number.

**Efficiency**: Unnecessary data will not be transmitted on the network and database server will be properly connected.

**Reusability**: The system can be reused in any organisation or site of the same group, by defining the organisation master definition under software license agreement.

**Integrity**: Only system administrator has right to access the database, not every user can access the information. Each user will be having rights to access the modules.

**Used tools and Platform:**

**Software Specifications**:

**Front End Tool:** Microsoft ASP.NET 2.0

**Back End Tool:** Microsoft SQL Server 2005

**Platform:**

Windows platform like: 2000 professional, XP &Vista etc…

**Testing Approach:**

It consist of the following test approaches we are going to use:

1. **Unit testing**: The Unit Testing is a test that tests each single module of the software to check for errors. This is mainly done to discover errors in the code of the online policy buying. The main goal of the unit testing would be to isolate each part of the program and to check the correctness of the code. In the case of the online health care insurance policy buying system, all the web forms and the C# classes will be tested. There are many benefits for this unit testing:

• The unit testing facilitates change in the code.

• It allows testing to be done in a bottom up fashion.

At the same time, unit testing has some disadvantages such as, it might not identify each and every error in the system.

1. **Integration testing**: In Integration Testing, the individual software modules are combined and tested as a whole unit. The integration testing generally follows unit testing where each module is tested as a separate unit. The main purpose of the integration testing is to test the functional and performance requirements on the major items of the project. All the modules of the project developed individually would be combined together and tested as a whole system in the integration testing.
2. **System testing:** The system testing is mainly done on the whole integrated system to make sure that the project that has been developed meets all the requirements. The test cases for the system testing will be the combination of unit and integration tests.
3. **Regression testing:** The Regression Testing is generally done whenever modifications are made to the source code of a project. The Regression Testing can also be defined as the process of testing changes made to the computer program and also makes sure that the older programming still works with the new changes. So, before any new version of a software product is released, the old test cases for the project will be run against the software with the changes made, to make sure that the old functionalities of the project still work.
4. **Acceptance testing:** This testing is generally performed when the project is nearing its end. This test mainly qualifies the project and decides if it will be accepted by the users of the system. The users or the customers of the project are responsible for the test.

**Milestones:**

* Master data for employee will be loaded from the employee database before test design. This will not be refreshed during the various cycles of testing.
* Transaction data on leave details of employees will be ported from the existing leave management system. This data will be refreshed for every cycle of testing.
* For load testing, data of 1000 policies transaction (assuming 3 per employee) should be provide to the testing team on the test environment.

**TEST CASES**

The following are the test cases for the Online HealthCare Insurance System:

* **TEST CASE 1 – USER LOGIN**

• Incorrect Input: Incorrect username, which is the email-id in the case of the Online Insurance policy System.

• Pass Criteria: An appropriate message should be generated to indicate that an invalid username has been typed.

• Correct Input: The correct input would be a valid e-mail id of the user and a correct password associated with the email-id which he uses to log in.

• Pass Criteria: The user should be directed to the webpage that the customer is intended to go to after he logs into the system.

* **TEST CASE 2 – USER REGISTRATION**

• Incorrect Input: Wrong format entered in the input fields for the registration page.

• Pass Criteria: An appropriate message should be generated to the user saying that he has entered the wrong format in the specific input field.

• Correct Input: The correct input would a correct format entered by the customer into the input fields of the registration page.

• Pass Criteria: The pass criteria for this test case would be a successful registration of the customer into the online Travel Booking system. The system would log the user into the system after this.

* **TEST CASE 3 – USER REGISTRATION**

• Incorrect Input: The data fields left out empty in the registration page.

• Pass Criteria: An error message should be generated to the user saying that he has to fill out those fields in order to be registered into the system.

• Correct Input: The correct input in this case, would be that the customer would enter the data in all the fields in the registration form.

• Pass Criteria: The pass criteria for the system would be that it accepts all the customer details and then registers the customer and helps him log into the system.

* **TEST CASE 4 – SEARCH AND BUY ONLINE Travel Booking POLICY**

• Incorrect Input: Incorrect input in this case, would be incorrect search criteria entered or incorrect format of data entered into the data entry fields of the travel booking search and booking page.

• Pass criteria: A message has to be generated to the user indicating the wrong entry that he has made in the fields.

• Correct Input: A correct input would be entering the data into the data entry fields in a correct format.

• Pass Criteria: The pass criteria for this test case would be that the search would return valid results and then when the customer made the buying, the system has to generate a confirmation to the customer and indicate that an SMS has been sent to the customer.

**PASS OR FAIL CRITERIA**

The test cases executed on the Online Travel Booking System will pass if they meet the specific requirements mentioned in the Vision document of the project. A test case is said to fail, if the desired functionality is not satisfied by the system.

**SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS**

**SUSPENSION CRITERIA**

Testing for all the dependant features will be suspended if a test case fails. The failed test case will be logged onto the test log which contains the description for the error.

**RESUMPTION REQUIREMENT**

The test cases which are not dependant on the case where the bug is reported will be executed in parallel with the bug fixing. Once the failed test case has been taken note of and has been identified and fixed then the testing for the failed test case will resume.

**TEST DELIVERABLES**

The following documents will be produced after the testing phase for the Online HealthCare Insurance System has been completed.

• Test Plan

• Test Cases

**Test Criteria:**

* Each phase of testing (test design, test execution etc.), level of testing (system, system integration etc.) and type of testing (performance, compatibility etc.) requires certain criteria as prerequisite and to determine completion by the various stake holders. The test criteria removes the ambiguity in terms of when a testing activity can start and when it is considered complete.

Few examples for online buying policies are as follows:

* Entry criteria for system testing: All unit test cases and component integration test cases should be executed and logs made available.
* Suspension criteria: Encountering defects which prevents further testing
* Resumption criteria: When new version is released after defect fixes and assurance provided.

**Roles and Responsibilities:**

* For booking travel the online policy, following roles would be identified:
* Testing related roles – test analyst, test lead, test manager for the various types and levels of testing.
* Developing lead – involved in clarification of design, participation in defect meetings, root cause analysis for defects etc.
* Business users – creating UAT (User Acceptance Testing) test cases and carrying out UAT.
* System support engineer – Involved in helping out the testing team with test environment setup.
* Database administrator –involved in providing test data from the existing production system, providing adequate data for users etc.
* Program Manager – involved in resolving issues in timely manner for testing team to proceed with their testing activities, co-ordinate with other development and business stakeholder in testing related activities.