Test Plan

Online Home Search

Prepared by:

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Problem Statement:

To test Online Home Search System Modules using Black-box and White-box testing covering Unit and Integration test by using Selenium testing tool.

System Modules:

1. Database connection
2. User Registration
3. User Login
4. Add Property
5. Search for Apartments

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1.0 INTRODUCTION

This web-application provides a way for apartment owners or estate agents to add the property details to the system and for prospective tenants to search for houses as per their preferences which include city and, locality or maximum rent or number of rooms in the apartment.

2.0 OBJECTIVES AND TASKS

2.1 Objectives of Test Plan

- Finding defects which may get created by the programmer while developing the software.
- Gaining confidence in and providing information about the level of quality.
- To prevent defects.
- To make sure that the end result meets the business and user requirements.

2.2 Tasks of Test Plan

- Identifying and describing appropriate test techniques.
- Verify and assess the Test Approach.
- Execute the tests, Log results, Report the defects.

Sr. No.	#Business Requirements (BR)	#Functional Requirements (FR)	#Test Scenarios (TS)	#Testing Approaches /Strategies (TA)
01	Reduce overhead of human interaction while addition of properties	Property should be added if not already present	Validate user, Add/Search for apartments	1.Functional Testing (Standard Testing)
02	Increase customer traffic and engagement	Minimum human intervention	Handling of absent search results	

3.0 SCOPE

This project aims to aid tenants in finding homes or owners in finding tenants for their apartments using the internet, removing the need for physical actions for the same.

4.0 TESTING STRATEGY

Approach	Type of Testing	Manual Testing		Automated Testing on Device	Tools/APIs/Libraries
		Using Device	Using Emulator		
Standard Testing (Functional Testing)	Unit Testing	Yes	No	Yes	Selenium IDE, Google Chrome web browser
	Integration Testing	Yes	No	Yes	
	Acceptance Testing	Yes	No	Yes	
Special Type of Testing to Address Specific Challenge	Compatibility Testing	Yes	No	Yes	

4.1 UNIT TESTING

Definition:
Each module that is developed by group members will to be tested individually to verify proper operation so that any faulty module can be fixed immediately rather than let it exist and then cause some major issue in the integration phase.

Participants:
Deepak Kadam, Arisha Chamadiya, Swati Patra

Methodology:
During this testing, the test team brainstorms the scope of testing, test strategy and drafts a detailed test plan.

MODULE/FUNCTIONALITY NAME:	Database connection test
UNIT/CLASS:	Database
CREATED BY:	Deepak Kadam
DATE OF CREATION:	22/09/2019
DATE OF REVIEW:	26/09/2019

TEST CASE ID	TEST UNIT/CLASS	TEST CASE	PRE-CONDITION	EXPECTED RESULT	ACTUAL RESULT	STATUS (PASS/FAIL)
1	Database	Validate DBMS Connection	JDBC driver should be present	Established	Established	Pass

Execution Status: Completed

MODULE/FUNCTIONALITY NAME:	User Login (Unregistered)
UNIT/CLASS:	Login, login.html
CREATED BY:	Swati Patra
DATE OF CREATION:	22/09/2019
DATE OF REVIEW:	26/09/2019

TEST CASE ID	TEST UNIT/CLASS	TEST CASE	PRE-CONDITION	EXPECTED RESULT	ACTUAL RESULT	STATUS (PASS/FAIL)
1	Login	Validate user credentials	User should be unregistered	Invalid credentials. Login unsuccessful	Invalid credentials. Login unsuccessful	Pass

Execution Status: Completed

MODULE/FUNCTIONALITY NAME:	User Registration
UNIT/CLASS:	Register, register.html
CREATED BY:	Arisha Chamadiya
DATE OF CREATION:	22/09/2019
DATE OF REVIEW:	26/09/2019

TEST CASE ID	TEST UNIT/CLASS	TEST CASE	PRE-CONDITION	EXPECTED RESULT	ACTUAL RESULT	STATUS (PASS/FAIL)
1	Register	Register the user credentials to the database	Connection to system should be established	Registration Successful	Registration Successful	Pass

Execution Status: Completed

MODULE/FUNCTIONALITY NAME:	User Login (Registered)
UNIT/CLASS:	Login, login.html
CREATED BY:	Swati Patra
DATE OF CREATION:	22/09/2019
DATE OF REVIEW:	26/09/2019

TEST CASE ID	TEST UNIT/CLASS	TEST CASE	PRE-CONDITION	EXPECTED RESULT	ACTUAL RESULT	STATUS (PASS/FAIL)
1	Login	Validate user credentials	User should be registered	Login successful	Login successful	Pass

Execution Status: Completed

MODULE/FUNCTIONALITY NAME:	Add property to the system
UNIT/CLASS:	HomeSearch, addProperty.html
CREATED BY:	Arisha Chamadiya
DATE OF CREATION:	22/09/2019
DATE OF REVIEW:	26/09/2019

TEST CASE ID	TEST UNIT/CLASS	TEST CASE	PRE-CONDITION	EXPECTED RESULT	ACTUAL RESULT	STATUS (PASS/FAIL)
1	addProperty.html	Fill the input fields and submit the details of the property	User should be logged in	Submission successful	Submission Successful	Pass
2	HomeSearch	Get data from addProperty.html and insert into the database	Database connection should be established	Insertion successful	Insertion successful	Pass

Execution Status: Completed

MODULE/FUNCTIONALITY NAME:	Search for apartments
UNIT/CLASS:	SearchApartment, searchProperty.html
CREATED BY:	Deepak Kadam
DATE OF CREATION:	22/09/2019
DATE OF REVIEW:	26/09/2019

TEST CASE ID	TEST UNIT/CLASS	TEST CASE	PRE-CONDITION	EXPECTED RESULT	ACTUAL RESULT	STATUS (PASS/FAIL)
1	searchProperty.html	Fill the input fields and submit the details	User should be logged in	List of available properties or no results found, if not.	List of available properties or no results found, if not.	Pass
2	SearchApartment	Get data from searchProperty.html, retrieve the entries from the database and return the result to the webpage	Database connection should be established	Results from the database	Results from the database	Pass

Execution Status: Completed

4.2 GUI TESTING

Definition:
GUI testing is the process of testing the system's Graphical User Interface of the Application Under Test. GUI testing involves checking the screens with the controls like menus, buttons, icons, and all types of bars - toolbar, menu bar, dialog boxes, and windows, etc.

Participants:
Deepak Kadam, Arisha Chamadiya, Swati Patra

Methodology:
We test GUI functions such as button clicks, window resizing using automation in Selenium IDE and check whether they perform their intended actions.

MODULE/FUNCTIONALITY NAME:	Testing of webpage GUI
MODULE:	addProperty.html, searchProperty.html
CREATED BY:	Deepak Kadam
DATE OF CREATION:	27/09/2019
DATE OF REVIEW:	28/09/2019

TEST CASE ID	TEST UNIT/CLASS	TEST CASE	PRE-CONDITION	EXPECTED RESULT	ACTUAL RESULT	STATUS (PASS/FAIL)
1	addProperty.html	After pressing the submit button, alert box is displayed showing the relevant message which is dismissed after pressing OK button	All the mandatory input fields should be filled by the user	Submission successful	Submission successful	Pass
2	searchProperty.html	After pressing the Search button, list of available properties is displayed in a table	All the mandatory input fields should be filled by the user	List of properties or No results	List of properties or No results	Pass

Execution Status: Completed

4.3 INTEGRATION TESTING

Definition:
Integration is a level of software testing where individual units are combined and tested as a group. The purpose of this level of testing is to expose faults in the interaction between integrated units.

Participants:
Deepak Kadam, Arisha Chamadiya, Swati Patra

Methodology:
Initially we are integrating all resource files then we are testing all integrated modules with selenium framework

PROJECT NAME:	Online Home Search
MODULE/FUNCTIONALITY:	Linked Resources Testing
CREATED BY:	Swati Patra
DATE OF CREATION:	29/09/2019
DATE OF REVIEW:	01/10/2019

4.4 USER ACCEPTANCE TESTING

Definition:
The purpose of acceptance test is to confirm that the system is ready for operational use. During acceptance test, end-users (customers) of the system compare the system to its initial requirements.

Participants:
User

Methodology:
This testing done with the help of user of the system. User is the one who will test the project.

PROJECT NAME:	Online Home Search
MODULE/FUNCTIONALITY:	Validate All Input Fields
CREATED BY:	Arisha Chamadiya
DATE OF CREATION:	02/10/2019
DATE OF REVIEW:	04/10/2019

ID	Test Description	Step #	Test Steps	Exp. Results	#Business Req. Covered	#Functional Req. Covered
1	Validating user personal information text fields	-	1) Send keys to username and password 2) Send action to database for checking	Text field constraints and user credentials are validated	Username and password are being verified using JavaScript	Login credentials has been validated through database

5.0 HARDWARE REQUIREMENTS

- RAM 1024MB+
- Intel Core i3 Processor

6.0 ENVIRONMENT REQUIREMENTS

6.1 Main Frame

- Operating Platform (Any Operating System)
- Java Technology
- Selenium IDE on Google Chrome

7.0 TEST SCHEDULE

Task Name	Start Date	Finish Date	Effort Estimation	Comments
Test Planning	13/09/2019	21/09/2019		Test Cases Formed
Review Requirements documents			4d	
Create initial test estimates			5d	
Unit Testing	22/09/2019	26/09/2019	5d	Modules Tested
GUI Testing	27/09/2019	28/09/2019	2d	
Integration testing	29/09/2019	01/10/2019	3d	Successful
User Acceptance Testing	02/10/2019	04/10/2019	3d	Successful
Resolution of final defects and final build testing	05/10/2019	08/10/2019	4d	Defects Found

8.0 FEATURES TO BE TESTED

- Login text fields validation
- Database fetching
- User credentials should be tested

9.0 RESOURCES/ROLES & RESPONSIBILITIES

1. Deepak Kadam – Unit Testing
2. Arisha Chamadiya – GUI Testing
3. Swati Patra – Integration Testing

10.0 DEPENDENCIES

- Tomcat Server Libraries
- JDBC Libraries
- Selenium IDE

11.0 TOOLS

- Google Chrome web browser
- MySQL
- HTML-CSS
- JavaScript
- AJAX

12.0 APPROVALS

Ms. R. M. WAHUL

Defect Report

ID	1
Project	Online Home Search
Product	Online Home Search
Release Version	1
Module	Search Property
Detected Build Version	1
Summary	Invalid data type and default value of parameter Rent on client side
Description	Maximum rent amount is of type double and should have default value 0 (zero) but was being accepted as empty string as the default value if left blank by the user
Steps to Replicate	Leave the maximum rent input field blank while submitting search request
Actual Result	Internal Server error 500 due to type mismatch at the server side
Expected Results	All the matching properties should be displayed without any constraint on rent amount if user leaves the input field for the same blank
Defect Priority	**HIGH**
Reported By	Group Members
Assigned To	Group Members
Status	Solved
Fixed Build Version	2