**Lighting Pattern Simulator**

**Test report**

Version *<2.0>*

*<24/04/18>*

**VERSION HISTORY**

|  |  |  |
| --- | --- | --- |
| **Version #** | **Implemented**  **By** | **Date** |
| 1.0 | Paridhi Gehlot (B16CS024)  Satya Bhavsar (B16CS033) | 1/04/18 |
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| 3.0 | Paridhi Gehlot (B16CS024)  Satya Bhavsar (B16CS033) | 24/04/18 |
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# 1.0 Introduction

## 1.1 Purpose

*The test report will provide summary of test cases generated and also gives its* *status i.e. whether the software has passed that particular test case or not.*

# 2.0 Test PLAN

            The function of the software will be tested by first drawing control flow graph (using Statement Coverage) and generating test cases with its help.

**3**.**0 Details of unit testing**

3.1 Enter\_Details (Test ID: 01)

            3.1.1 Test Items: name, contact\_no

            3.1.2 Features To Be Tested: Validity of name and contact\_no entered by

                     user.

           3.1.3 Item Pass/Fail Criteria: Test item passes if valid name and  contact\_no are accepted and exception is thrown in case of invalid name and contact\_no.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Test Case | Intended Result | Actual Result | Pass/Fail | Comments |
| 1. | name=s1 | Error message (name cannot contain digit) and retake name as input. | Error message (name cannot contain digit) and retake name as input. | Pass | Proper exception handling done for name |
| 2. | name= customer, contact\_no=902 | Error message (length of contact\_no should be 10) and retake contact\_no as input. | Error message (length of contact\_no should be 10) and retake contact\_no as input. | Pass | Proper exception handling done for contact\_no |
| 3. | name= customer, contact\_no=998169028t | Error message (contact\_no should only contain numbers) and retake contact\_no as input. | Error message (contact\_no should only contain numbers) and retake contact\_no as input. | Pass | Proper exception handling done for contact\_no |
| 4. | name=customer, contact\_no=9981690283 | Accept name and contact\_no | Accepted name and contact\_no | Pass | None |

3.2 Cover (Test ID: 02)

             3.2.1 Test Items: option

             3.2.2 Features To Be Tested: Proper functioning of Cover on entering option.

               3.2.3 Item Pass/Fail Criteria: Test item passes if Cover does specified function on entering option value 1, 2 or 3 and exception is thrown for any other value of option.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Test Case | Intended Result | Actual Result | Pass/Fail | Comments |
| 1. | option=1 | Accepts option and calls enter\_details() and cover\_customer | Accepted option and calls enter\_details() and cover\_customer | Pass | None |
| 2. | option=2 | Accepts option and calls Display\_history() | Accepted option and calls Display\_history() | Pass | None |
| 3. | option=3 | Accepts option and exits software. | Accepts option and exits software. | Pass | None |
| 4. | option=4 | Error message and retake input option | Error message and retake input option | Pass | Proper exception handling done for option |
| 5. | option=g | Error message and retake input option | Error message and retake input option | Pass | Proper exception handling done for character input in option |

3.3 Verify\_Login (Test ID: 03)

              3.3.1 Test Items: username,password , opt\_int.

           3.3.2 Features To Be Tested: Logging admin in only on entering correct username and password.

             3.3.3 Item Pass/Fail Criteria: Test item passes if admin gets logged in when correct username and password are entered, otherwise exception is thrown.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Test Case | Intended Result | Actual Result | Pass/Fail | Comments |
| 1. | name=wrong,  password=wrong2 | Error message and retake input name and password. | Error message and retake input option | Pass | Proper exception handling done. |
| 2. | name=softwaare,  pass=lightpatternsimulator | Name and password accepted, admin is logged in and call cover() function | Name and password accepted and call cover() function | Pass | None |

3.4 Display\_History(Test ID: 04)

              3.4.1 Test Items: c\_name, c\_contact\_no,choice

              3.4.2 Features To Be Tested: Showing history of customer when existing customer details are entered.

              3.4.3 Item Pass/Fail Criteria: Test item passes if history of customer is displayed when existing customer name(c\_name) and contact number(c\_contact\_no) are entered, and exception is thrown otherwise and choice is input.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Test Case | Intended Result | Actual Result | Pass/Fail | Comments |
| 1. | c\_name=abc, c\_contact\_no=999999,  file is empty,  choice=1 | Error message(customer does not exist), choice is taken as input and Display\_history() is called | Error message(customer does not exist), choice is taken as input and Display\_history() is called | Pass | Exception handling done for non existing customer details. |
| 2. | c\_name=abc, c\_contact\_no=999999,  file is empty,  choice=2 | Error message(customer does not exist), choice is taken as input and exit() function called | Error message(customer does not exist), choice is taken as input and exit() function called | Pass | Exception handling done for non existing customer details. |
| 3. | c\_name=abc, c\_contact\_no=999999,  file is empty,  choice=d | Error message(customer doesnot exist), choice is taken as input. Error message for incorrect choice is shown and choice is retaken as input | Error message(customer doesnot exist), choice is taken as input. Error message for incorrect choice is shown and choice is retaken as input | Pass | Exception handling done for non existing customer details and for choice |
| 4. | c\_name=student, c\_contact\_no=7212342311, file contains the above customer details | The design for specified customer is shown | The design for specified customer is shown | Pass | None |

3.5 Cover\_Customer (TEST ID: 05)

              3.5.1 Test Items:buil\_no, pattern\_no,option

              3.5.2 Features To Be Tested: Display and confirmation of simulated pattern on building on entering valid building number, pattern number and option.

              3.5.3 Item Pass/Fail Criteria: Item passes if final design is displayed and confirmed when valid buil\_no, pattern\_no and option are entered, and exception is thrown otherwise.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Test Case | Intended Result | Actual Result | Pass/Fail | Comments |
| 1. | buil\_no=d | Error  message and retake buil\_no. | Error  message and retake buil\_no. | Pass | Exception handling done for invalid buil\_no |
| 2 | buil\_no=2  pattern\_no=f | buil\_no accepted but pattern\_no not accepted and Error message. | Error  message and retake pattern\_no. | Pass | Exception handling done for invalid pattern\_no |
| 3. | buil\_no=3  pattern\_no=2  option=1 | buil\_no and pattern\_no accepted and design associated with customer should be written to file | buil\_no and pattern\_no accepted and design associated with customer is written to file | Pass | None |
| 4. | buil\_no=1  pattern\_no=4  option=2 | buil\_no and pattern\_no accepted and Cover() should be called | buil\_no and pattern\_no accepted and Cover() is called | Pass | None |
| 5. | buil\_no=4  pattern=1  option=d | buil\_no and pattern\_no accepted. Error message for option and retake option as input | buil\_no and pattern\_no accepted. Error message for option and retake option as input | Pass | Exception handling done for invalid option |

# details of system testing

## 4.1 item 1 –Admin login

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **TEST STEP/**  **INPUT** | **Intended Result** | **Actual Result** | **Pass/Fail** | **Comments** |
| 1 | Enter username and password           (username= software, password=lightpatternsimulator) | Menu for admin (Cover)is displayed | Menu for admin (Cover)is displayed | Pass | None |

## 4.2 item 2-Display and confirm final design

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **TEST STEP/**  **INPUT** | **Intended Result** | **Actual Result** | **Pass/Fail** | **Comments** |
| 1. | Enter option            (option=1) | Option is accepted. Username is asked. | Option is accepted. Username is asked. | Pass | None |
| 2. | Enter the name              (name=customer) | Name should be accepted and password should be asked for. | Name is accepted and password is asked | Pass | None |
| 3. | Enter the contact number(contact\_no=9981690283) | Building types should be displayed. | Building types are displayed. | Pass | None |
| 4. | . Choose building type             (option=1) | Corresponding patterns should be displayed | Corresponding patterns are displayed | Pass | None |
| 5. | Choose light pattern             (option=3) | Menu for confirmation/exit should be displayed | Menu for confirmation/exit is displayed | Pass | None |
| 6. | Enter option to confirm design or exit.          (option=1) | Design associated with customer saved in database | Design associated with customer saved in database | Pass | None |

**4.3 ITEM 3- Display user history**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **TEST STEP/**  **INPUT** | **Intended Result** | **Actual Result** | **Pass/Fail** | **Comments** |
| 1. | Enter option (option=2) | Details of customers are asked for | Details of customers are asked for | Pass | None |
| 2. | Enter the name and contact number of customer              (name=customer, contact\_no=9981690283) | User history,i.e.,design selected by the customer whose details are entered is shown | User history,i.e.,design selected by the customer whose details are entered is shown | Pass | None |

# 5. System Testing by Testing Team

# 5.1 Admin Login

(username = bro, password = bro)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **INPUT** | **Intended Result** | **Actual Result** | **Pass/Fail** | **Comments** |
| 1 | bro bro | Enter the password: | Enter the password: |  |  |
|  | bro\_bro\_ ( \_ = space) | Incorrect username or password. Press any key to retry. | Incorrect username or password. Press any key to retry. |  |  |
|  | a | Enter the username: | Enter the username: Enter the password: | **Fail** |  |
| 2 | After inputting both username and password with multiple spaces, when correct username (bro) and correct password (bro) is entered. | Choose the option : | Incorrect username or password. Press any key to retry. | **Fail** |  |
| 3 | Correct username (bro) and correct password (bro) | Choose the option : | Choose the option : | Pass |  |

# 5.2 Display and confirm final design

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **TEST STEP/**  **INPUT** | **Intended Result** | **Actual Result** | **Pass/Fail** | **Comments** |
| 1. | Enter option            (option=1) | Option is accepted. Username is asked. | Option is accepted. Username is asked. | Pass | None |
| 2.1 | Enter the name  (name = abc abc) | Invalid input. | Enter the contact no: Invalid Contact number. | **Fail** | None |
| 2.2 | Enter the name  (name = abc) | Enter the contact no: | Enter the contact no: | Pass |  |
| 3.1 | Enter the contact number  (contact\_no=01234567899) | Contact number accepted | Invalid contact number. | **Fail** | Tel. No. are of 11 digits (with STD code) |
| 3.2 | Enter the contact number  (contact\_no=0123456789) | Contact number accepted | Contact number accepted | Pass |  |
| 4. | . Choose building type             (option=1) | Corresponding patterns should be displayed | Corresponding patterns are displayed | Pass | None |
| 5. | Choose light pattern             (option=3) | Menu for confirmation/exit should be displayed | Menu for confirmation/exit is displayed | Pass | None |
| 6. | Enter option to confirm design or exit.          (option=1) | Design associated with customer saved in database | Design associated with customer saved in database | Pass | None |

# 5.3 Registering a User Multiple Times

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **TEST STEP/**  **INPUT** | **Intended Result** | **Actual Result** | **Pass/Fail** | **Comments** |
| 1. | Enter option  (option=1) | Username is asked. | Username is asked. |  | Already tested |
| 2. | Enter the name              (name=abc) | Name should be accepted and password should be asked for. | Name is accepted and password is asked |  | “ |
| 3. | Enter the contact number(contact\_no=0123456789) | Building types should be displayed. | Building types are displayed. |  | “ |
| 4. | . Choose building type             (option=2) | Corresponding patterns should be displayed | Corresponding patterns are displayed |  | “ |
| 5. | Choose light pattern             (option=3) | Menu for confirmation/exit should be displayed | Menu for confirmation/exit is displayed |  | “ |
| 6. | Enter option to confirm design or exit.          (option=1) | Design associated with customer saved in database | Design associated with customer saved in database |  | “ |

# NOTE:

Now same user (abc) with contact number (0123456789) is registered twice with combination of building type and light pattern as (1,3) and (2,3).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **TEST STEP/**  **INPUT** | **Intended Result** | **Actual Result** | **Pass/Fail** | **Comments** |
| 7 | Enter option (option=2) | Details of customers are asked for | Details of customers are asked for | Pass | None |
| 8 | Enter the name and contact number of customer              (name=abc, contact\_no=0123456789) | Both the designs selected by the customer are shown | Only the last design selected by the customer is shown | **Fail** | None |

**Comments by testing team:**

1. Program exits after viewing customer history.
2. No option to edit admin details or customer details.
3. No login for customer, he/she may wish to view his history.
4. On entering invalid contact number (or any invalid data), program asks for a valid contact number (or the valid data) for infinite times.
5. No option to add more designs.
6. Additional features may be added to the software.

# 6. Unresolved test instances

|  |  |  |
| --- | --- | --- |
| Test Case ID | Summary of Defect | Why not resolved |
| None | None | None |