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JJT Activity Monitoring Software Testing

Black and White Box Testing Results

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# Test Cases - Black box Testing

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| **Login Screen Test Cases** | | | | |
| **Test No.** | **Test Case** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | Test if user is able to login successfully. | Using a valid username and password should grant access to the application. | The menu for the application was successfully loaded. | PASS |
| 2 | Test if invalid users are not able to login to the application. | Inputting an incorrect username and password should not allow access to the application and an error should be displayed. | No access was granted and a message stating an invalid username or password had been used. | PASS |
| 3 | Test if a valid username but invalid password should not allow access to the application. | Using a valid username but incorrect password should not allow access and display an error message. | No access was granted and invalid username or password error was displayed. | PASS |
| 4 | Test that an invalid username but correct password should not allow access to the application. | Using a valid password but invalid username should not allow access to the application menu and should display an error message. | No access was granted and an error message was displayed stating incorrect username or password. | PASS |
| 5 | Test with empty fields that logging in is prevented. | Not inputting anything into the textfields should not allow access to the application and should display an error message. | Menu didn’t load as expected and error message was displayed stating incorrect username or password. | PASS |
| 6 | Check password is masked on the screen. | Anything input into the password field should be displayed as bullet points. | Any character input was masked and not readable. | PASS |
| 7 | Check if login correctly handles case sensitivity. | Using a valid user but incorrect casing should not allow access to the application. | Where capitals would usually be used, replacing them prevented login to the application. | PASS |

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| **Menu Screen Test Cases** | | | | |
| **Test No.** | **Test Case** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | Create Agent button should open the create agent form. | Create Agent form should load and menu should be closed. | Correct form loaded and menu closed. | PASS |
| 2 | Delete Agent button should open the delete agent form. | Delete Agent form should load and menu should be closed. | Correct form loaded and menu closed. | PASS |
| 3 | Modify Agent button should open the modify agent form. | Modify Agent form should load and menu should be closed. | Correct form loaded and menu closed. | PASS |
| 4 | Agent Sales button should open the agent sales screen. | Agent sales screen should load and menu should be closed. | Correct screen loaded and menu closed. | PASS |
| 5 | Create Ticket button should open the create ticket form. | Create Ticket form should load and menu should be closed. | Correct form loaded and menu closed. | PASS |
| 6 | Delete Ticket button should open the delete ticket form. | Delete Ticket form should load and menu should be closed. | Correct form loaded and menu closed. | PASS |
| 7 | Ticket Validity button should open the ticket validity form. | Ticket Validity form should load and menu should be closed. | Correct form loaded and menu closed. | PASS |
| 8 | Clients List button should open the Clients list screen. | Clients List screen should load and menu should be closed. | Correct screen loaded and menu closed. | PASS |
| 9 | Log out button should return the user to the log in screen. | Menu should be closed and log in screen appear. | Login screen loaded and menu closed. | PASS |
| 10 | Logged in user should appear as active. | Using valid details at the log in screen should display corresponding agent as green in the active agents section. | Appropriate agent username displayed and correctly colour coded. | PASS |
| 11 | Logged out users should appear as inactive. | All agents not logged in should be displayed as red in the active agents section. | Correct agents are displayed and appropriately coloured in red. | PASS |
| 12 | Newly created agent should appear on the list of active agents. | Creating a new agent should display the newly created username in the active agents section. | New user is displayed in the list and is also correctly displayed as inactive. | PASS |
| 13 | Deleted agent should not be visible on the list of active agents. | Deleting an agent should remove the corresponding username from the list of active agents. | Once the agent has been deleted the corresponding username is removed from the list. | PASS |
| 14 | Option description should change when mouse hovers over a button. | Hovering over a button should display the corresponding description. | Hovering over each button changes the description to the corresponding button and when the mouse is removed it goes back to the appropriate message. | PASS |
| 15 | Tabs should display appropriate buttons when selected. | Switching between the 2 tabs should display the appropriate buttons. | Switching between the tabs changes the area to display the correct buttons. | PASS |

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| **Create Agent Form Test Cases** | | | | |
| **Test No.** | **Test Case** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | Valid parameters should create a new agent on submit. | A new agent should be created and should be able to interact with the system. | Agent was created and the details allowed access to the application. | PASS |
| 2 | All invalid parameters shouldn’t create a new agent on submit. | Error message(s) should be displayed and agent should not be created. | Agent was not created and error messages for invalid fields shown. | PASS |
| 3 | Invalid username should prevent creation of new agent. | Appropriate error message should be displayed and agent should not be created. | Creation of agent was not possible and an appropriate message was displayed beneath the username textfield. | PASS |
| 4 | Invalid password should prevent creation of new agent. | Appropriate error message should be displayed and agent should not be created. | Creation of agent was not possible and an appropriate message was displayed beneath the password textfield. | PASS |
| 5 | Invalid name should prevent creation of new agent. | Appropriate error message should be displayed and agent should not be created. | Creation of agent was not possible and an appropriate message was displayed beneath the name textfield. | PASS |
| 6 | Invalid address should prevent creation of new agent. | Appropriate error message should be displayed and agent should not be created. | Creation of agent was not possible and an appropriate message was displayed beneath the address textfield. | PASS |
| 7 | Invalid phone number should prevent creation of new agent. | Appropriate error message should be displayed and agent should not be created. | Creation of agent was not possible and an appropriate message was displayed beneath the phone number textfield. | PASS |
| 8 | Using an already used username should prevent creation of agent. | Appropriate error message should be displayed and agent should not be created. | Creation of agent was not possible and appropriate message displayed. | PASS |
| 9 | Only phone numbers of 11 digits should be accepted. | By trying to use only 5 digits an agent should not be created and an appropriate error message should be displayed. | Creation of agent was not possible and appropriate message displayed. | PASS |
| 10 | Creating an agent should only be allowed using names of only alphabetical characters. | Agent should not be created whilst using non alphabetical characters in the field. | Creation of agent was not possible and appropriate message displayed. | PASS |
| 11 | Home button opens the menu. | Menu should be loaded and Create Agent form closed. | The menu was opened and the create agent form closed as expected. | PASS |

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| **Delete Agent Form Test Cases** | | | | |
| **Test No.** | **Test Case** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | Delete agent functionality should work as expected, transferring sales to another agent. | Agent should be removed from the system and their sales transferred to a selected agent. | Agent was removed and correct sales were allocated to the chosen agent. | PASS |
| 2 | First choice box should show all agents. | Clicking on the choice box should display a clickable list of agents. | Choice box displayed all agents including newly created ones. | PASS |
| 3 | Second choice box should show all agents. | Clicking on the choice box should display a clickable list of agents. | Choice box displayed all agents including newly created ones. | PASS |
| 4 | Name should automatically be displayed when an agent is selected from the first choice box. | Selecting an agent to be deleted from the choice box should display their name on screen. | The on screen name changed with the corresponding agents. | PASS |
| 5 | Sales should automatically be displayed when the agent is selected from the first choice box. | Selecting an agent from the choice box should display their sales on screen. | The correct amount of sales for the agent was displayed. | PASS |
| 6 | An agent being deleted cannot pass their sales to themselves. | Selecting the same agent from both choice boxes should result in the agent not being deleted. | The agent was not deleted and an error message was displayed. | PASS |
| 7 | An active agent cannot delete themselves. | Selecting the active/logged in user to be deleted should result in the agent not being deleted. | The agent was not deleted and an error message was displayed. | PASS |
| 8 | Home button should return to the main menu. | Pressing the home button should switch the screen to the menu and close the delete agent screen. | The menu was loaded and the delete agent form was closed. | PASS |

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| **Modify Agent Form Test Cases** | | | | |
| **Test No.** | **Test Case** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | Modifying an agent functionality should be available and working. | Agent details will be modified and can be seen in other screens as the newly modified version. | Agents new details were changed and where used the changed details could be seen. (Logging in with new password and username on menu) | PASS |
| 2 | Choice box should display all agents. | All agents should be clickable from the choice box. | All usernames for agents on the system were shown. | PASS |
| 3 | Agent ID field should be non-editable. | Trying to change the agent id should not be possible. | Trying to click in the field was impossible. | PASS |
| 4 | Choice box value should autofill the fields with the corresponding information. | All fields should contain the selected agent information once they have been selected from the choice box. | All fields displayed the correct information corresponding with the agent chosen. | PASS |
| 5 | A blank username field should not be allowed when modifying an agent. | Modification of an agent should not be processed. | Modification was not allowed and an appropriate error message was displayed. | PASS |
| 6 | An already used username should not be accepted when modifying an agent. | Modification of an agent should not be processed. | Modification was not allowed and an appropriate error message was displayed. | PASS |
| 7 | A blank password field should not be accepted when modifying an agent. | Modification of an agent should not be processed. | Modification was not allowed and an appropriate error message was displayed. | PASS |
| 8 | A blank name field should not be accepted when modifying an agent. | Modification of an agent should not be processed. | Modification was not allowed and an appropriate error message was displayed. | PASS |
| 9 | Name field should not allow use of numbers. | Modification of an agent should not be processed. | Modification was not allowed and an appropriate error message was displayed. | PASS |
| 10 | A blank address field should not allow modification of an agent. | Modification of an agent should not be processed. | Modification was not allowed and an appropriate error message was displayed. | PASS |
| 11 | A blank phone number field should not allow modification of an agent. | Modification of an agent should not be processed. | Modification was not allowed and an appropriate error message was displayed. | PASS |
| 12 | A phone number not of 11 digits should not allow modification of an agent. | Modification of an agent should not be processed. | Modification was not allowed and an appropriate error message was displayed. | PASS |
| 13 | Home button should open the menu. | Menu should be loaded and Modify Agent form closed. | Menu was displayed and Modify Agent form was closed. | PASS |

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| **Agent Sales Screen Test Cases** | | | | |
| **Test No.** | **Test Case** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | Choice box should display all agents. | All agents should be clickable from the choice box. | All usernames for agents on the system were shown. | PASS |
| 2 | Selecting an agent should display the correct sales for each of the 3 events on the system. | Changing the value of the choice box should change the values of the sales. | The correct sales for the corresponding agent were displayed. | PASS |
| 3 | Making ticket sales should change the amount of sales shown on this screen. | Creating 5 tickets for each event should add 5 to the number of sales for each event and 15 to the total sales. | The sales were updated correctly. | PASS |
| 4 | Cancelling ticket sales should change the amount of sales shown on this screen. | Cancelling 5 tickets for each event should minus 5 from the number of sales for each event and 15 from the total sales. | The sales were updated correctly. | PASS |
| 5 | A total sales value of less than 15 should be coloured in red font. | By removing all sales from the agent a red 0 should be shown. | A red 0 was displayed for the agent. | PASS |
| 6 | A total sales value of more than 15 but less than 25 should be coloured in orange font. | By creating 10 tickets for the agent an orange 10 should be shown. | An orange 15 was displayed for the agent. | PASS |
| 7 | A total sales value of more than 25 should be coloured in green font. | By creating 25 tickets for an agent a green 25 should be shown. | A green 25 was displayed for the agent. | PASS |
| 8 | Home button should open the menu. | Menu should be loaded Agent sales screen closed. | Menu was displayed and the screen was closed. | PASS |

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| **Create Ticket Form Test Cases** | | | | |
| **Test No.** | **Test Case** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | Choice box should display all of the available events. | Clicking the choice box should show all 3 events on the system and they should all be selectable. | The choice box showed all events and all were clickable options. | PASS |
| 2 | On pressing submit the amount of tickets chosen on the slider should allocate the sales to the active agent. | The amount of tickets allocated to the active agent should correspond with the number and event selected on the slider and choice box respectively. | Looking at the agent sales screen after selling tickets for each event reflected the correct amount tickets had been allocated. | PASS |
| 3 | Selling a ticket for an event on a date that isn’t valid should not be permissible. | Processing of a ticket should not be allowed. | The ticket was not sold and an appropriate error message was displayed. | PASS |
| 4 | Home button should open the menu. | Menu should be loaded and Create Ticket form should be closed. | Menu was displayed and the create ticket screen was closed. | PASS |

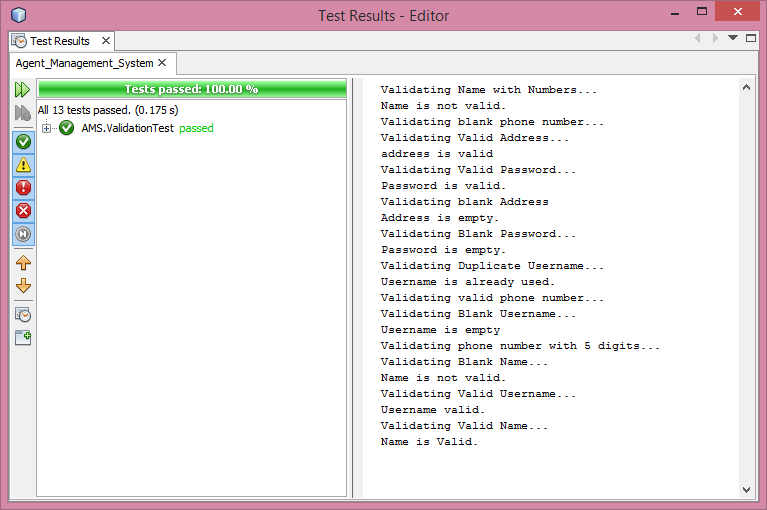
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| **Delete Ticket Form Test Cases** | | | | |
| **Test No.** | **Test Case** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | Choice box should display all of the available events. | Clicking the choice box should show all 3 events on the system and they should all be selectable. | The choice box showed all events and all were clickable options. | PASS |
| 2 | On pressing submit the amount of tickets chosen on the slider should remove the sales from the chosen agent. | The amount of tickets sold by the active agent should be decreased by the corresponding number and event selected on the slider and choice box respectively. | Looking at the agent sales screen after cancelling tickets for each event reflected the correct amount tickets. Also an appropriate confirmation message was displayed. | PASS |
| 3 | Choice box should display all of the available agents. | Clicking the choice box should show all agents on the system. | The choice box showed all agents and all were clickable options. | PASS |
| 4 | Should not be able to cancel amount of sales that would lead to an agent selling less than 0 sales. | The tickets should not be deleted and an error shown. | The cancellation was processed and the agent sales showed negative sales. | FAIL |
| 5 | Home button should open the menu. | Menu should be loaded and Delete Ticket form should be closed. | Menu was displayed and the delete ticket screen was closed. | PASS |

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| **Ticket Validity Form Test Cases** | | | | |
| **Test No.** | **Test Case** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | Choice box should display all of the available events. | Clicking the choice box should show all 3 events on the system and they should all be selectable. | The choice box showed all events and all were clickable options. | PASS |
| 2 | The date picker should show dates in the format dd/MM/yy | Clicking a date should fill the form in with the correct format. | The dates picked were displayed in the correct format. | PASS |
| 3 | On submit the valid sale dates for the event should be changed. | The dates should be changed and this should be seen when selling a ticket and on the clients list screen. | The client list showed that the date had changed and the creating ticket form interacted with the date as should. | PASS |
| 4 | Home button should open the menu. | Menu should be loaded and Delete Ticket form should be closed. | Menu was displayed and the delete ticket screen was closed. | PASS |

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| **Clients List Screen Test Cases** | | | | |
| **Test No.** | **Test Case** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| 1 | Each event should display the correct location. | Each event should display the correct location. | The correct locations were shown on screen. | PASS |
| 2 | The valid sale dates should change with the ticket validity form. | When a change is made to the valid sale date in the ticket validity form it should be updated on this screen. | The dates were changed in accordance with the ticket validity screen. | PASS |
| 3 | The quantity sold should correspond with the amount of sales made by agents. | The total sales for each event should reflect the sum of all sales for the agents. | By making it so that every agent sold 5 tickets each event displayed 15 sales which is the correct amount. | PASS |
| 4 | The quantity remaining should correspond with the amount of sales not made by agents. | The remaining tickets should reflect the amount of sales made. (Initial quantity – amount of tickets sold.) | By making it so every agent had sold 5 tickets the quantity remaining for each event was 15 less than what was initially remaining which is the correct result. | PASS |
| 5 | If the quantity sold is less than 5 the text should be red. | By removing tickets from the events to a value less than 5 the number should appear on screen as red. | By removing all ticket sales from the agent a red zero was shown for all events. | PASS |
| 6 | If the quantity sold is more than 5 but less than 25 the text should orange. | By selling an amount of tickets between 5 and 15 the number on screen should appear orange. | By making every agent sell 5 tickets the result on screen displayed an orange 15 for each event. | PASS |
| 7 | If the quantity sold is more than 25 the text should be green. | By selling an amount of tickets greater than 25 the number on screens should appear green. | By making every agent sell 10 tickets the result on screen displayed a green 30 for each event. | PASS |
| 8 | Home button should open the menu. | Menu should be loaded and Delete Ticket form should be closed. | Menu was displayed and the delete ticket screen was closed. | PASS |

# JUnit Testing (White Box Testing)

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| **Validation Class – Validation Functions:** | | | | |
| **Test no.** | **Test** | **Expected Result** | **Actual Result** | **Pass/**  **Fail** |
| 1 | Testing validateUsername() method with a valid username. | A true result should be returned. | “Username is valid.” Was printed to the console indicating a true result was returned. | PASS |
| 2 | Testing validateUsername() method with no value. | A false result should be returned. | “Username is empty.” Was printed to the console indicating a false result was returned. | PASS |
| 3 | Testing validateUsername() method with a username already on the system. | A false result should be returned. | “Username is already used.” Was printed to the console indicating a false result was returned. | PASS |
| 4 | Testing validatePassword() method with a valid password. | A true result should be returned. | “Password is valid.” Was printed to the console indicating a true result was returned. | PASS |
| 5 | Testing validatePassword() method with a blank value. | A false result should be returned. | “Password is empty.” Was printed to the console indicating a false result was returned. | PASS |
| 6 | Testing validateName() method with a valid password. | A true result should be returned. | “Name is valid.” Was printed to the console indicating a true result was returned. | PASS |
| 7 | Testing validateName() method with a blank value. | A false result should be returned. | “Name is not valid.” Was printed to the console indicating a false result was returned. | PASS |
| 8 | Testing validateName() with numbers. | A false result should be returned. | “Name is not valid.” Was printed to the console indicating a false result was returned. | PASS |
| 9 | Testing validateAddress() method with a blank value. | A false result should be returned. | “Address is empty.” Was printed to the console indicating a false result was returned. | PASS |
| 10 | Testing validateAddress() method with a valid address. | A true result should be returned. | “address is valid.” Was printed to the console indicating a true result was returned. | PASS |
| 11 | Testing validatePhone() with a valid phone number. | A true result should be returned. | Test passed. | PASS |
| 12 | Testing validatePhone() with only 5 digits. | A false result should be returned. | Test passed. | PASS |
| 13 | Testing validatePhone() with a blank value. | A false result should be returned. | Test Passed. | PASS |



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| **Create ticket controller – checkDate function:** | | | | |
| **Test no.** | **Test** | **Expected Result** | **Actual Result** | **Pass/**  **Fail** |
| 1 | Test checkDate() function with a future date. | A true result will be returned. | A true result was returned. | PASS |
| 2 | Test checkDate() function with a past date(). | A false result will be returned. | A false result was returned. | PASS |
| 3 | Test checkDate() function with todays date. | A true result will be returned. | A false result was returned. | FAIL |

