|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| This test to satisfy Requirement 1.1 | |  |  |  |
| Case | Action | Expected | Actual | Pass/Fail |
| 1 | a. The user can choose origin airport on the GUI | Origin should populate with all airports in system | All airports appear | Pass |
|  | b. The user can choose destination airport on the GUI | Destination should populate will all the airports in the system | All airports appear | Pass |
|  | c. The user can choose categories (cost,airline and time) on the GUI |  |  |  |
|  | c.i. Cost |  |  |  |
|  | c.i.1Highest | Costs should appear in descending order | Costs descend | Pass |
|  | c.i.2Lowest | Costs should appear in ascending order | Costs ascend | Pass |
|  | c.ii Time |  |  |  |
|  | c.ii.1 Quickest | Time should appear in ascending order | Time ascends | Pass |
|  | c.ii.2. Longest | Time should appear in descending order | Time descends | Pass |
|  | c.iii Airline |  |  |  |
|  | c.iii.1 Shows paths that use the input airline | Only paths that contain the input airline should appear | Paths appear | Pass |
|  | d. if no paths can be found, the system tells the user | System will let the user know what s occuring | User is aware | Pass |
| This test to satisfy Requirement 1.2 | |  |  |  |
| 2 | a.The GUI will display the results on the Jtable | Results appear formatted in jtable | Results populate appropriately | Pass |
| This test to satisfy Requirement 1.31 | |  |  |  |
| 3 | a. The user can add/modify airport on the GUI | Add a new | Airport shows up in destination and origin | Pass |
|  | b. Press airports | airport should |  |  |
|  | c. Press create new airport | show up |  |  |
| This test to satisfy Requirement 1.32 | |  |  |  |
| 4 | a. The user can add/modify routes based on existing routes on the GUI | Create new | Create route dialog appears | Pass |
|  | b. Press routes | route should |  |  |
|  | c. Press create new route | show up |  |  |
| This test to satisfy Requirement 1.3.3.1 | |  |  |  |
| 5 | a. The user can delete airports on the GUI | Delete airport |  |  |
|  | b. Press airports | show up |  |  |
|  | c. Press delete airport |  |  |  |
| This test to satisfy Requirement 1.3.3.2 | |  |  |  |
| 6 | a. The user can delete routes on the GUI | Delete route |  |  |
|  | b. Press routes | show up |  |  |
|  | c. Press delete route |  |  |  |
| This test to satisfy Requirement 1.3.4 | |  |  |  |
| 7 | a. The GUI can display most current route information |  |  |  |
| This test to satisfy Requirement 1.3.5 | |  |  |  |
| 8 | a. The GUI can display airports that can be reached from a given airport | Information show |  |  |
|  | b. Press "more info" button | in Jtable |  |  |
| This test to satisfy Requirement 1.3.6 | |  |  |  |
| 9 | a. The GUI can display air route information for a given route |  |  |  |
| This test to satisfy Requirement 1.3.7 | |  |  |  |
| 10 | a. The user can close airport | Open/Close |  |  |
|  | b. The user can re-open closed airport | an airport should |  |  |
|  | c. Press airports | show up |  |  |
|  | d. Press open/close airport |  |  |  |
| This test to satisfy Requirement 1.3.8 | |  |  |  |
| 11 | a. The GUI can save any modifications made |  |  |  |
|  |  |  |  |  |
| This test to satisfy Requirement 2 | |  |  |  |
| 12 | a.Open the data file from a text file | Data will  be separated | |  |
|  | b.Check if data separated into sections | by '#' keyword "# |  |  |
|  | c.Check the keyword | comment" |  |  |
|  |  |  |  |  |
| This test to satisfy Requirement 3 | |  |  |  |
| 13 | a. System will allow user to enter new routes |  |  |  |
| This test to satisfy Requirement 3.1.5.2 | |  |  |  |
| 14 | a.Press routes | Error: the flight |  |  |
|  | b. Press create new route | arrives before |  |  |
|  | c. The new route require airline | it departs |  |  |
|  | d. The new route require departure airport |  |  |  |
|  | e. The user should choose an existing origin airport |  |  |  |
|  | f. The new route require arrival airport |  |  |  |
|  | g. The user should choose an existing arrival airport |  |  |  |
|  | h. The user type in departure time 0800 |  |  |  |
|  | i. The user type in arrival time 0600 |  |  |  |
|  | j. The user type in price 180 |  |  |  |
| This test to satisfy Requirement 3.1.5.3 | |  |  |  |
| 15 | a.Press routes | Error: the flight |  |  |
|  | b. Press create new route | arrives after |  |  |
|  | c. The new route require airline | midnight |  |  |
|  | d. The new route require departure airport |  |  |  |
|  | e. The user should choose an existing origin airport |  |  |  |
|  | f. The new route require arrival airport |  |  |  |
|  | g. The user should choose an existing arrival airport |  |  |  |
|  | h. The user type in departure time 2000 |  |  |  |
|  | i. The user type in arrival time 2400 (next day) |  |  |  |
|  | j. The user type in price 180 |  |  |  |
| This test to satisfy Requirement 3.1.6.1 | |  |  |  |
| 16 | a.Press routes | Error: the price | |  |
|  | b. Press create new route | Is less than |  |  |
|  | c. The new route require airline | zero |  |  |
|  | d. The new route require departure airport |  |  |  |
|  | e. The user should choose an existing origin airport |  |  |  |
|  | f. The new route require arrival airport |  |  |  |
|  | g. The user should choose an existing arrival airport |  |  |  |
|  | h. The user type in departure time 0800 |  |  |  |
|  | i. The user type in arrival time 1200 |  |  |  |
|  | j. The user type in price -600 |  |  |  |
|  |  |  |  |  |
| This test to satisfy Requirement 4.1 | |  |  |  |
| 17 | a. Press airports | Error: The airport |  |  |
|  | b. Press create new airport | code should be |  |  |
|  | c.Type in airport code "456" | letters |  |  |
|  | d. Press add |  |  |  |
| 18 | a. Press airports | Error: The airport |  |  |
|  | b. Press create new airport | code should be 3 |  |  |
|  | c.Type in airport code "ASDF" | letters |  |  |
|  | d. Press add |  |  |  |
| This test to satisfy Requirement 4.2 | |  |  |  |
| 19 | a. Press airports | Error: The airport |  |  |
|  | b. Press create new airport | must be no added |  |  |
|  | c.Type in airport code "ATL" | routes |  |  |
|  | d. Press add |  |  |  |
|  |  |  |  |  |
| This test to satisfy Requirement 5 | |  |  |  |
| 20 | a. Press routes | Delete route window |  |  |
|  | b. Press delete route | show up |  |  |
|  |  |  |  |  |
| This test to satisfy Requirement 6 | |  |  |  |
| 21 | a. Press airports |  |  |  |
|  | b. Press delete airport |  |  |  |
|  | c.Choose an airport to delete |  |  |  |
|  | d. Press delete |  |  |  |
|  | e. Check if any routes associated with deleted airport must be deleted as well | |  |  |
|  |  |  |  |  |
| This test to satisfy Requirement 10.1 | |  |  |  |
| 22 | a.Press "More Info" button On GUI | The information |  |  |
|  | b.Check the information on JDialog | show on Jdialog |  |  |
|  |  |  |  |  |
| This test to satisfy Requirement 11.1 | |  |  |  |
| 23 | a.Press "More Info" button On GUI | The information |  |  |
|  | b.Check the information on JDialog | show on Jdialog |  |  |
|  |  |  |  |  |
| This test to satisfy Requirement 12 | |  |  |  |
| 24 | a.Press "More Info" button On GUI | The Jdialog should |  |  |
|  | b.Check the information on JDialog | has the information |  |  |
|  |  | of carrier, departure | |  |
|  |  | airport/time,arrival | |  |
|  |  | airport/time,price. |  |  |