Software Testing Report

New South Wales Traffic and Penalty Analysis Tool

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# Unit Tests

| **No** | **Test Case** | **Expected Results** | **Actual Results** |
| --- | --- | --- | --- |
| **1.0** | **Overall Report** |  |  |
| 1.1 | Test user-selected timeframe | User can input a selected timeframe for filtering. |  |
| 1.2 | Test filter for offence code | Filter for offence code is displayed. |  |
| 1.3 | Test table for offence information | Table for offence information by selected period is displayed. |  |
| **2.0** | **Chart Distribution** |  |  |
| 2.1 | Test user-selected timeframe | User can input a selected timeframe for filtering. |  |
| 2.2 | Test pie chart distribution | Pie chart displaying distribution is generated by selected period. |  |
| **3.0** | **Cases Captured** |  |  |
| 3.1 | Test user-selected timeframe | User can input a selected timeframe for filtering. |  |
| 3.2 | Test filter by offence description | Filter by offence description is available. |  |
| 3.3 | Test camera/radar selection | Options to select specific types of cameras or radars are available. |  |
| 3.4 | Test display filtered table | Table based on pre-selected filters is displayed. |  |
| 3.5 | Test re-entering filters | User can re-enter filters for display. |  |
| **4.0** | **Cases Analyse** |  |  |
| 4.1 | Test Mobile Usage Offence Over Time | Chart of Mobile Usage Offence Over Time is displayed. |  |
| 4.2 | Test Top 10 Mobile Usage Offences. | Line graph of the Top 10 Mobile Usage Offences Per Year is displayed. |  |
| 4.3 | Test re-selecting timeframe | User can re-select timeframe. |  |
| **5.0** | **Financial Analysis** |  |  |
| 5.1 | Test user-selected timeframe | User can input a selected timeframe for filtering. |  |
| 5.2 | Test table of locations | Table of locations with highest total amount of penalties is displayed. |  |

# Coverage Report

A description of the coverage of your unit tests, including how you evaluated coverage (function, statement, branch, condition)

# Requirements Acceptance Testing

| **Software  Requirement No** | **Test** | **Implemented (Full /Partial/ None)** | **Test Results (Pass/ Fail)** | **Comments (for partial implementation or failed test results)** |
| --- | --- | --- | --- | --- |
| 1.0 | The system allows users to select a specific time-period for reporting penalty cases. |  |  |  |
| 1.1 | The system provides an intuitive text-based widget for period selection. | Full |  |  |
| 1.2 | The system provides a table to display the list information of offences based on the offence code and period. | Full |  |  |
| 1.3 | The system allows exporting the tables as a PDF file. | None |  | Technical challenges were encountered during the implementation. |
| 2.0 | The system enables users to generate charts showing the distribution of cases based on offence codes for a selected period. |  |  |  |
| 2.1 | The system provides an intuitive text-based widget for period selection. | Full |  |  |
| 2.2 | The systems display a pie-chart displaying the distribution of the number of the cases for each offence. | Full |  |  |
| 2.3 | The system displays the description of the offence code when hovering the mouse pointer on the offence code. | Partial |  | The requirement was not fully implemented due to time constraints. |
| 2.4 | The system displays other information of the offence code when clicks on the offence code. | Partial |  | The requirement was not fully implemented due to time constraints. |
| 2.5 | The system allows exporting the charts as a PDF file. | None |  | Technical challenges were encountered during the implementation. |
| 3.0 | The system provides a filter to retrieve all cases captured by camera/radar within a user-selected timeframe. |  |  |  |
| 3.1 | The system requires inputting a user-selected timeframe. | Full |  |  |
| 3.2 | The system includes options to select specific types of cameras or radars. | Full |  |  |
| 3.3 | The system displays a table based on the pre-selected filters. | Full |  |  |
| 3.4 | The system allows re-entering filters for display table. | Full |  |  |
| 3.5 | The system allows exporting the tables as a PDF file. | None |  | Technical challenges were encountered during the implementation. |
| 4.0 | Analysing the cases caused by mobile phone usage. |  |  |  |
| 4.1 | The system requires inputting the type of Mobile Usage Offence to display. | Full |  |  |
| 4.2 | The system allows re-selecting offence types and timeframe for display. | Full |  |  |
| 4.3 | The system displays the line graph per selected timeframe. | Full |  |  |
| 4.4 | The system allows exporting the line graphs as a PDF file. | None |  | Technical challenges were encountered during the implementation. |
| 5.0 | The system offers financial analysis tools to assess the total fees collected on selected period. |  |  |  |
| 5.1 | The system requires inputting a user-selected timeframe. | Full |  |  |
| 5.2 | The system includes an option to display a table of locations with highest total amount of penalties in descending order. | Full |  |  |
| 5.3 | The system allows re-selecting timeframe for display. | Full |  |  |
| 5.4 | The system allows exporting the tables as a PDF file. | None |  | Technical challenges were encountered during the implementation. |