Usability Testing

## Scope

The usability testing of the Driver Log was conducted by learning drivers and their parents on August 20, 2021].

During the usability evaluation, eight participants, matching the user profile(s), were asked to complete a range of task with the software over a 30-minute period. During this time, participants:

* Performed real-world tasks on the Drivers Log while thinking allowed
* Answered questions about how easy they found the tasks to complete and their overall satisfaction with the software

## Participants

Eight participants, having the following profile characteristics, evaluated the Drivers Log.

*NOTE: Add or delete main categories as needed. Refer to screener for main demographic information.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Audience Type**   |  |  | | --- | --- | | Learning Drivers | 5 | | Supervisors | 3 | |  |  | | **TOTAL (participants)** | **8** | | **Computer Usage**   |  |  | | --- | --- | | 0 to 10 hrs. wk. | 1 | | 11 to 25 hrs. wk. | 2 | | 26+ hrs. wk. | 5 | | **TOTAL (participants)** | **8** | |
| **Age**   |  |  | | --- | --- | | 16-18 | 3 | | 18-35 | 2 | | 26-39 | 1 | | 40-59 | 2 | | **TOTAL (participants)** | **8** | | **Gender**   |  |  | | --- | --- | | Women | 4 | | Men | 4 | | **TOTAL (participants)** | **8** | |

## Tasks performed

During the usability evaluation, participants were asked to complete ten (10) scenarios or “real-life” tasks using the software. Participants were provided with minimal training. The tasks were presented in random order and participants were given no hints during the process.

| **#** | **Task description** | **Usability goal** | **Metric** | **Target** |
| --- | --- | --- | --- | --- |
| 1 | *Use the output interface to determine the total number of trips driven with light traffic.* | Accuracy | Percentage of users who could correctly identify the total number of trips with light traffic selected. | 100% |
| 2 | *Use the output interface to determine the total number of unapproved hours.* | Accuracy | Percentage of users who could correctly identify the total number of unapproved hours. | 80% |
| 3 | *Use the input interface to start and stop a new trip lasting for at least 2 minutes.* | Efficiency | Average time to create a new data record. | 2-3 minutes. |
| 4 | *Create a trip with the daytime variable selected.* | Ease of use | Percentage of users who are able to locate and select the daytime checkbox, but not the nighttime checkbox. | 80% |
| 5 | *Create a trip with the supervisor approval variable selected.* | Ease of use | Percentage of users who are able to locate and select the supervisor approval checkbox. | 100% |
| 6 | *Create 5 new trips with any variables selected.* | Timeliness/ Capacity | The duration in time that it would take to create 5 trips. | 5-10 minutes. |
| 7 | *Use the output interface to determine the total number of hours.* | Communication of message | Percentage of users who are able to identify and read the total number of hours. | 85% |
| 8 | *Create a trip with all variables selected.* | Effectiveness | Percentage of users who are able to make all output variables being increased by 1. | 80% |
| 9 | *Create a trip with no variables selected.* | Communication of message | Percentage of users who are greeted with an error message | 80% |
| 10 | *Use the output interface to determine the total number of trips with any road type selected.* | Effectiveness | Percentage of users who could correctly identify the total number of trips with any road type selected. | 70% |

# Data collection

The user will perform the following tasks and rate the efficiency and effectiveness of the application.

Task 1:

*Use the output interface to determine the total number of trips driven with light traffic.*

One a scale of 1 to 5 please rate how difficult you found the task to perform

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very difficult |  |  |  | Very easy |
| 1 | 2 | 3 | 4 | 5 |

Task 2:

*Use the output interface to determine the total number of unapproved hours.*

One a scale of 1 to 5 please rate how difficult you found the task to perform

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very difficult |  |  |  | Very easy |
| 1 | 2 | 3 | 4 | 5 |

Task 3:

*Use the input interface to start and stop a new trip lasting for at least 2 minutes.*

One a scale of 1 to 5 please rate how difficult you found the task to perform

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very difficult |  |  |  | Very easy |
| 1 | 2 | 3 | 4 | 5 |

Task 4:

*Create a trip with the daytime variable selected.*

One a scale of 1 to 5 please rate how difficult you found the task to perform

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very difficult |  |  |  | Very easy |
| 1 | 2 | 3 | 4 | 5 |

Task 5:

*Create a trip with the supervisor approval variable selected.*

One a scale of 1 to 5 please rate how difficult you found the task to perform

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very difficult |  |  |  | Very easy |
| 1 | 2 | 3 | 4 | 5 |

# Feedback Evaluation

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| I found the software easy to use. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Strongly disagree |  |  |  | Strongly agree | | 1 | 2 | 3 | 4 | 5 | |
| I found the data easy to read. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Strongly disagree |  |  |  | Strongly agree | | 1 | 2 | 3 | 4 | 5 | |
| I think I would be able to use the application on a daily basis. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Strongly disagree |  |  |  | Strongly agree | | 1 | 2 | 3 | 4 | 5 | |
| I would recommend this product to friends or family. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Strongly disagree |  |  |  | Strongly agree | | 1 | 2 | 3 | 4 | 5 | |
| Compared to existing products, I found the software easier to navigate. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Strongly disagree |  |  |  | Strongly agree | | 1 | 2 | 3 | 4 | 5 | |
| I found it easy to input data. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Strongly disagree |  |  |  | Strongly agree | | 1 | 2 | 3 | 4 | 5 | |
| I was able to use the software in an appropriate timeframe. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Strongly disagree |  |  |  | Strongly agree | | 1 | 2 | 3 | 4 | 5 | |
| I required help to use the program. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Strongly disagree |  |  |  | Strongly agree | | 1 | 2 | 3 | 4 | 5 | |