# Evaluation

## UI testing approach and justification:

We selected to implement a manual Lab UI testing approach as it allows for greater evaluation of subjective elements of our application without the need for specialised tools or suites for automated testing. Human observation allows for better identification of graphical glitches or inconsistencies which sometimes aren’t identified within automated approaches. This approach also allows us to find testers that match our chosen personas and end users, to better represent the range of computing skill and literacy of our intended users. Furthermore, considering the prototypical nature of our application the highly automatable aspects of UI testing become less important when compared with the user-friendliness aspects we hope to test such as typography, spelling, consistency and overall feel and design. Lab testing provides a platform to gather quantitative and qualitative data using varying questions, as well as, meaning we can observe the participant and the issue that can arise when different users use a system.

## Evaluation Plan:

### Scope

Test 10 end-to-end user processes, including Logging in to a valid road user account user, Creating a new road user account, Road user viewing and then paying an outstanding toll.

### Purpose

1. Test if users can perform all of these processes.
2. See if users find any errors or usability issues
3. Measure how appealing our UI is
4. Identify if these processes are not convoluted

### Schedule & Location

In user’s home workspaces during the evening (requested by users).

## Sessions

1. Sessions will take 30 minutes to 1 hour
2. Sessions will begin with explanation of the application
3. Users read information sheet and sign consent form
4. Users are given time to view the system and processes we’d like them to attempt
5. Users perform all the processes
6. Users complete SUS form
7. Users are interviewed about their experience with opportunity for feedback

## Equipment

1. Laptop/Desktop computer with keyboard and mouse
2. Screen recording
3. Audio recorder

## Participants

Recruit at least 3 participants. All participants should be reasonable fits for our personas or within a normal range of computer literacy to allow for critical testing. All participants received an information sheet and a consent form.

## Scenarios

1. Log in to a valid road user account ( [test1@test.com](mailto:test1@test.com), Test123!)
2. Find the bill to be paid on home page
3. Pay for the bill
4. Use the saved card to pay for the bill (cvv 123)
5. Navigate to toll history and view payment history
6. Create a new road user account
7. Log in to a valid toll operator account
8. Navigate to toll history and view a drivers toll history
9. Change language
10. Change the font size

## Subjective metrics

1. SUS questionnaire
2. Interview with participant with facilitator taking notes

## Objective metrics

1. Time taken
2. Number of errors
3. Number of times user used the back button

## Roles

1. Single person acted as facilitator and took some notes
2. Recordings also made