

CSSD UI Evaluation report



March 13, 2017

Group l

Craig, Sam, Tom, Gareth

Contents

[Approach to Evaluation 2](#_Toc476418607)

[What are we testing? 2](#_Toc476418608)

[Plan for Evaluation 2](#_Toc476418609)

[Scope 2](#_Toc476418610)

[Purpose 2](#_Toc476418611)

[Schedule & Location 2](#_Toc476418612)

[Sessions 2](#_Toc476418613)

[Equipment 2](#_Toc476418614)

[Participants 2](#_Toc476418615)

[Scenarios 2](#_Toc476418616)

[Subjective Metrics 2](#_Toc476418617)

[Objective Metrics 2](#_Toc476418618)

[Roles 2](#_Toc476418619)

[Conduction of Evaluation 2](#_Toc476418620)

[Ethical Considerations 2](#_Toc476418621)

[Re-Design Suggestions 2](#_Toc476418622)

# Approach to Evaluation

GOOGLE Guerrilla (Think-out-loud)

SUS (in not so lab-like conditions)

## What are we testing?

* Overall Ease
* Satisfaction
* Likelihood to use

# Plan for Evaluation

## Scope

We will cover all aspects of the customer GUI

## Purpose

The purpose of the test is to ensure that the UI is easy to use, navigable and contains all the features that a user would expect.

## Schedule & Location

Location: Sheffield Train Station

Schedule: TBC

## Sessions

## Equipment

Laptop

Webcam

Microphone

Screen-capture software

## Participants

We will recruit 4 public transport users of varying ages as participants. They will be given a consent form, instructions, and use of a test device.

## Scenarios

User 1

“Could you please buy a typical single journey ticket using cash”

Show Token GUI

Get user to buy most frequently bought ticket as guest

Pay with Cash

User 2

“Please buy a Timed pass using the card payment method”

Show Token GUI

Get user to buy Timed Pass as guest

Pay with Card

User 3

Task 1

“Please login to the mobile app and top up your balance by £15”

Give login account details

Show Mobile GUI

Top Up

Task 2

“Okay, could you now please buy a typical single journey ticket using the balance you have just added”

Show Token GUI

Get user to buy most frequently bought ticket as user

Pay with Account Balance

User 4

Task 1

“Please login to the mobile app and top up your balance by £15”

Give login account details

Show Mobile GUI

Top Up

Task 2

“Okay, could you now please buy a timed pass using the balance you have just added”

Show Token GUI

Get user to buy timed pass as user

Pay with Account Balance

## Subjective Metrics

Subjective Metrics will be measured using SUS after each task scenario to test for overall ease, satisfaction and likelihood to use/recommend.

## Objective Metrics

* Successful Completion Rates
* How many times the participant asks for help with the task

## Roles

Presenter will give the participant an introduction giving them the necessary information and then the required task(s).

Data will be captured using technology, therefore no other roles are necessary.

# Ethical Considerations

See Ethical Considerations document.

# Report on Evaluation

We conducted our evaluations in a train station so that we would be testing using the correct demographic for our system. The downside to this was that the people in train stations are extremely time conscious therefore are reluctant to take part in tests, or even when they do take part to take any real time in their consideration of the system. This was suitable because this is the kind of pressure the system would have to hold up against but in terms of receiving feedback it was less than ideal.

During the UI evaluation, we tested our program with a variety of key demographics such as age and gender; as the system should be suitable for all users. One thing that was commented across all the tests was that the system was simple, streamlined and consistent, as represented by one of our subjects; (1:50 – YoungGuy.Mp4).

However, the Token Machine section of the program was considered complex due to its control scheme; we believe this was due to the lack of touch screen or dedicated keyboard layout which would inevitably be present in an actual real-world implementation. We feel that it would make more sense for the GUI to have an arrow to progress you to the next stage, rather than using a keyboard; this is used on many of the Ticketing Machines available today.

Another comment was that the language selection worked well but that we must make sure that the translations are accurate as that can be a barrier to the usability of the system, this would also affect its adaptable nature and capability to be implemented in all environments; (5:00-OlderFemale.mp4).

As can be seen by the SUS results shown in the above graph, our results varied from between 60 and 82.5. As researched by Bangor et al., 2009, it is deemed above average if the result’s average is above 68. Our research resulted in an average of 71, indicating that our system scored above average; however, this does not mean it does not require improvements; as mentioned previously, the input mechanism needs redesigning / modifying.

Overall, our research has concluded that the design is simplistic and easy to use, which the public liked; however, it does need some design concepts surrounding navigation updated.

# Re-Design Suggestions

We believe that should the system be redesigned, it should incorporate an on-board keyboard and use touch screen capabilities for all actions. Therefore, there should be a button (possibly in the shape of an arrow) that allows you to progress onto the next screen; rather than using a physical enter key as the current design. This would simplify the design and provide a input technique similar to tablet computers which majority of the population use.