

# Test Report

Application Milestone by Arsenal

To verify our GUI we created tests both for the stationary mode and the driving mode. We thought that we will get a more realistic result if we test it on people who have not applied this course. We found ten people with different experiences of mobile systems. For the stationary mode we used cognitive walkthrough tests to get input about our GUI and to find possible difficulties. For the moving mode we used the new SICS Occlusion App to verify that the driving mode passed the SICS and NHTSA guidelines.

## Cognitive Walkthrough tests

The cognitive walkthrough tests focused on setting up a route and adding some milestones. We also asked the test-person to think about what the different interaction possibilities did. We did this to see if the expectation of the test person would match the execution in the application. In nearly all the tests the expectation matched the execution, but we found some interesting problems. When the test persons were pressing the wrong milestone for info, it was a big difference between people with good experience of mobile user interface and people with less experience. The people with less experience had a tendency to press the “back”-button instead of press on the map to hide the info-view. This was very natural for the people with good experience and they did it automatically.

Other suggestions of improvements that the test gave us was the ability to remove a milestone from the sidebar as a complement to the current way, in the map.

## Occlusion tests

Overall we found the occlusion tests very successful. A lot of tests we performed passed the SICS and NHTSA guidelines. We could see that some tasks were more difficult than others especially on the test persons with less experience than average. Another important observation was that tasks and information that are clear to us weren't as clear to the test group. In fact had the majority of the group problems with certain tasks, such as exit a suggested stop. We would have to change the text on those buttons, from “Skip” to “Next” in order to make it more reasonable.

The Occlusion test app worked nearly every time, but in some cases we felt like it made our application hard to interact with when the display wasn't occluded. This problem made the test results not as good as if it was perfect and made the TSOT run away a bit.

Overall we received a lot of good feedback on the clear color scheme in the app. Many of the test persons found that those colors made it a lot easier to navigate in the application.

To see the data from the Occlusion test open the file: "Occlusion\_app\_test\_results.xlsx" and read the README file for info about the data and the different tests we made.