CS532 Software Engineering Test Report

ICE TRACK System

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March 10, 2016

Team ICE TRACK

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From the inception of the idea until the making of the prototype, our team vision was focused on making a high quality system that combines the high standards, appropriates techniques, and the correct implementation of the agile methodology. Our goal as a team was to conduct a variety of tests on our system to assure a high quality product delivery. As a result, we designed different scenarios and test cases to verify the proper behavior from our system.

The requirements accumulated demanded a combination of white box and black box testing techniques to ensure high quality level of the product. Our programmers were conducting series of white box testing, unit testing specifically, as they implemented their code in the platform. Meanwhile the testers generated large number of test cases and possibilities in which the system might fail or produce incorrect results. Since our platform is web based at the front end and uses Ruby On Rails on the back end, a combination of unit, functional, and integration testing was designed by our team to test the different possible behaviors that can influence our system’s functionality, from basic unit testing like resizing web browser’s windows to check the stability of the layout, and web forms input verification, to testing the flow of large data from the server to the user and vice versa to ensure a flawless system operation.

After finishing our first increment, the system passed the majority of the tests that were designed. Most of our front end testing was based on user inputs. All data entry points were tested for verifying, encoding and appropriate tagging. They all passed. Certain functionalities such as a help functionality and certain web design attributes( for example: changing forms/elements appearance if the user hovers over them on the webpage) failed, they were not integrated in the system for time contraints reason. In general our team succeeded at meeting the major requirements for our product. However some of the requirements were not met at the deadline which induced an automatic failure for certain cases.