

Higher Order Testing

Team 3 - WikiDroid

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For our higher order testing, we are choosing usability testing, function testing, and configuration testing.

In usability testing, we will be giving WikiDroid to at least 6 different people and writing down their actions, reactions, and thoughts. Afterwards, we will provide them with a questionnaire over WikiDroid and use their responses to analyze its overall usability. This is a good fit for our project, as the entire reason for wanting to develop this app is due to usability restraints of Wikipedia's own mobile app, such as ease of reading multiple articles.

In function testing, we are testing the function of our application according to the specifications created in the beginning, attempting to find any discrepancies between our application and the specification. We have chosen function testing to discover if we have neglected to implement any function that a user could do in our app. To do the function testing, we used the use cases from our project backlog to make a list of possible actions the user could do. For each function that we listed on the document, we tried to execute the use cases on the mobile devices, looking to see if all of them were implemented. This is important for our app because there were several features we initially planned to implement that we did not implement in the final product, which leads to confusion among users.

In configuration testing, we are trying to test our app's performance, stability and general UI layout on different devices, especially devices with different screen sizes and memory configurations, also possibly different versions of android. Since we do not own that many devices, we decide to utilize emulators to conduct this testing. First for screen sizes, we are testing on four different configurations - small, normal, large and xlarge, which are ADP2, galaxy nexus, nexus 7 and nexus 10 correspondingly. For screen size of large and xlarge, since they are tablet devices, we will also partially focus on the testing

of usability on those devices. For memory sizes, we are considering testing for memory size of 288MB (memory size of ADP2), 512MB (memory size of nexus s), 1024MB (memory size of galaxy nexus) and 2048MB (memory size of nexus 10), with reasonable heap sizes. For Android versions, (depends on the actual device minimum version), we will be testing against Android 4.0 (API 14), Android 4.1 (API 16) and Android 4.4 (KitKat).