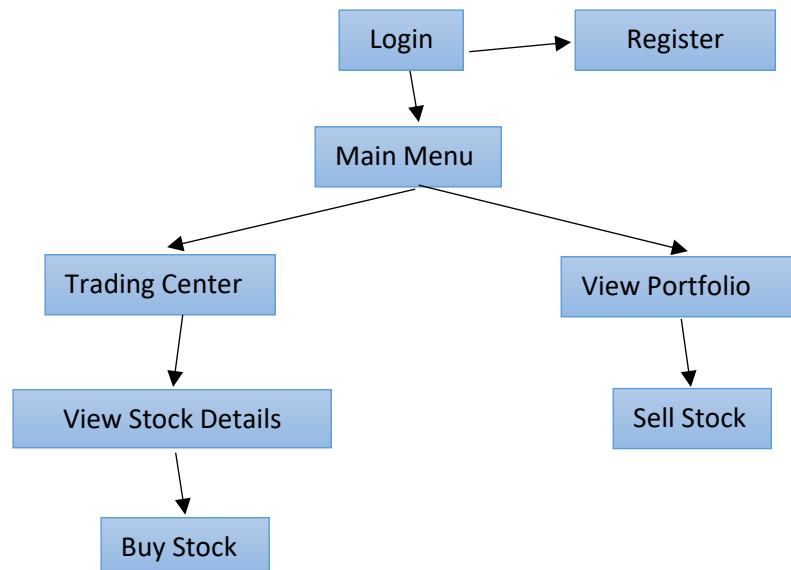


Testing tools

Android studio. Android studio has a built-in emulator, which able to let user select which phone they want to use and different android version are also provided, and this emulator work with the build-in debug mode, and will also logging every errors that occur during navigate to the application. Example function like, by entering `Log.i("Info", " increasing number")` between every part of the code, error able to identify easily because it will shows which part that cause the code stop running. This will save up a lot of time during debugging process. Android studio also enable to us to export an APK and save into smartphone for testing, and we are using 2 smartphone during testing which is LG-G3 5.5 inch display support android 5.0 and Redmi 3 5.2 inch display that support android 6.0. We test with different display size to ensure that our layout still looks fine with any size of display, and we also testing with different android studio to make sure that there is no bug or any problem while using older version of android.

Testing Analysis Report

Bottom up Integration



Top down integration testing is carried out as our FundFair application integration testing because we are using RAD (Rapid Application Development) methodology. Top down integration able to provide benefits for testing in early stage because it able to simulate the behaviour of lower-level modules that not yet integrated (Staff, n.d.), so that our Login and Register function able to done before moving to the next function buy, sell stock and view portfolio. Like view portfolio function can only be done when the user has an account to login and buy stock, system can retrieve the portfolio details after user done those step.

As results, there is no stubs that required which make us easier to test our function, yet we still manage to create and test module that have similar function before moving to the next part. Example, login and register, both are tested together and view stock information will be another test, all the modules will be tested individually before merge them together.

Top down integration will be using both white box testing and black box testing. For unit testing part will use white box testing to find out any error code or any logical error, because need to ensure there is no error occur again at future progression (Staff S. T., n.d). Black box testing will be carried out for every end of phase which objective is to let tester to test FundFair application without any guidance from developer.