Descriptions of The Testing Approaches

Bash script (what we finally used for the test):
We created a bash script test.sh under prototypes/tests/ to test the correctness of the front-end application. It gets the console input and valid accounts files from the tests folder for each test cases, run the application then diff the real console output with the expected output as well as the transaction summaries. Writing scripts for testing was our original plan from assignment 1, since it is easier to interact with the console. And more importantly, one script file can be generally applied to all the test cases without the need to create extra test suite and test case files. All the front-end functions covered by the test plan were tested by the script. The failure in the source code and test cases have been fixed.

Java + Maven:
There is also a maven project that contains the Java version of our test under prototypes /src/test. It is functional, except that it requires the expected output files to contain the full version of console outputs rather than only the tails. It is mainly because we print ">" to make the console looks better when typing in commands, which is a tail of the message but not a new line. To handle System.exit() in our code as well as be able to stop the application once the inputs are all tested, there is a expectedSystemExit() function added into the template. The test suite AllTest.java and each test cases can all be found under src/test.