**Individual account of the group work in project**

**Project approach**

In our group we decided that we will have an agile approach, work with Scrum framework as we had success with it in previous projects. When we started off, our first iteration went well. We completed the coding part and integrated Ares dashboard successfully with our tests. I have to mention here that the code we wrote in the last assignment (test automation of Sweden Bank website had issues, which meant we spent a lot of time to fix the code before we could implement the Ares modules in the code. However, a concerted effort in the first iteration ensured that task was completed on time.

In second iteration our work approach was highly flawed as we didn´t follow the Scrum framework. Our coordination, delegation of work, responsibilities were completely off the track, which resulted in a delay. In a real job-scenario it would have enormous consequences, especially in terms of cost overrun and face loss for a company/department.

We have since then held a meeting together and tried to understand what went wrong. We narrowed down to following: Our attitudes have been highly irresponsible; our coordination and group work have been a disaster. Elements of laziness and wrong prioritization are among other culprits. It is a shame nobody of us went ahead and did take an initiative to continue and finish the assignment before deadline. What we have learnt from this episode is: More responsible attitude, no procrastination and a well-planned approach.

Practically what could have been done was:

* Appointed a lead (i.e. a Scrum Master) . He could have monitored the progress regularly and actively. One way of doing this could be by creating milestones. Coordinated and planned regular meetings. In fact, ensure the agile values and principles of the scrum framework was followed.
* Distribution of work was done in a written manner rather than in oral and ad hoc way.
* Arrange some team building events to create a better understanding among the group members (before next assignment)
* Ensure that tasks were evenly distributed among the group members.

**Choice of methods**

Automation testing

Our automation of the testing might appear unjustified because the time it took to code it could have been done quicker had we manually scripted the same test cases. However, the automation’s main advantage is that when a test is repeated multiple times(regression testing) due to code changes, automation makes defects to be easily identified and fixed. In our case we will only test once so we will never be able to enjoy the fruit of our effort to automate the test.

**Exploratory Testing**

A disadvantage of automation testing is that you are confined to the script, Here, exploratory testing complements automation strategy excellent. ET allows you to more freely explore an application and is usually more successful in finding serious defects over a shorter period. To a tester it gives opportunity to empathize with the role of the user, make choices/mistakes only a customer will do. Within minutes of our exploratory testing session we unearthed 2 ‘major’ severity level bugs. 2 bugs that would be hard to track by automated testing.

Well we could have gained more from our ET session if we planned to do it in a structured manner by including a test charter as described in test plan. Due to time constraint we didn’t make the test charters and we conducted freestyle exploratory testing instead.

A charter contains pre-defined areas/features you want to cover, How you can test it but despite that it leaves room for the tester to explore uninhibited, targeted and more efficiently.

In all I can say that a more comprehensive testing of an application with the combination of ET and automated testing is strongly recommended as it allows us to utilize the benefits of both approaches and deliver a high quality product.

Tools

Another issue we have encountered is issues with git repositories. Unfortunately, we have in our team not been able to work properly with Github. It is recommended the team is upgraded to use this particular Version Control System.

**Results of the Test Summary Report**

We have conducted a limited number of tests. All the user stories that were described in last assignment have been covered, except 3 that were not possible due to external dependencies.

Total number of tests we performed was 24, of which 10 were manually tested and 14 automation tested. I believe that we should have focused more on the exploratory testing as it was more random testing that was done in the first ET session.

We had 22 passed and 2 failed Test cases. Both failed test cases were found during our exploratory testing and is related to deletion of the bank accounts (See the attached detailed bug reports ERR-001 & ERR-002). Both has been defined as major-severity level bugs and should be corrected with high priority.

It is strongly recommended that in next iteration, the exploratory testing session is done with a test charter that specifically focuses on particular modules, that includes ‘bank accounts’. Usually defects are clustered in a few modules.