

Group 17 – Software Design Project Weekly Report for Week 45

In this initial week of our project, we started our work by first deciding on the main aspects of how we are going to work as a group. We decided to use Discord as our main medium to communicate as we thought it would be easier to share documents, links and communicate in different channels in parallel; without all the communication lines getting tangled up. We also created a WhatsApp group for mobile communication.

After setting our communication, we agreed on to utilize git workflow as our main protocol for project workflow. We also agreed on to work in peers while programming; roles interchanging between a main coder and an assisting pilot. In addition to these, we also created documentation for commonly used git commands and the naming convention we decided on.

Following the setup phase of our project, we decided on to start with User Story 1 by having a meeting. After we agreed on our first user story, we had a group discussion on the preliminary design for our solution to the user story. We decided on a design and visualized it in the form of a class design by using Visual Paradigm software.

We then proceeded by having a meeting with our supervisor. During the meeting we asked the questions we listed during our meetings to our supervisor. In accordance with the feedback we had, we decided to change our design. Our intended final design can be seen in Figure 1. Afterwards, we started programming our designed solution.

One of the major difficulties we encountered during the development was to understand how ZAP pscan works. In order to fully understand it, we consulted ZAP proxy blog and wiki. An additional major difficulty was to grasp how can we compile rules without having to include their dependencies. We overcame this problem by implementing reference objects in the form of class paths for the rule classes contained in the JAR files.

For the test case, we have implemented 5 rules as described in the user story and 2 additional rules. We also have unit test written for each to ensure the desired functionality and we set up Firefox to test ZAP. Now it can load multiple JAR files and get the rules inside JAR file. In addition, ZAP can now generate violation report as an output.

As of the end of this week, we are very close to fully completing the development, with some testing and documentation left. We also decided on our next user story and came up with a preliminary design for our solution. Our plan is to sign off our current user story in the early days of the Week 46 and start working on the next user story.