

EE 382V Software Evolution Project Progress Report 1

Generating Coverage for Regression Testing

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The phase 1 of our project is the preparation phase. In this phase, we managed to build the environment for the coverage tool which we are going to develop.

Firstly, we migrated the target source code and testing code from the external resources into our project code base. There are 7 source code modules and corresponding testing modules on which we want to run our tools. We created separated packages for different source code and testing code modules.

Secondly, we used the project management tool, Maven, to manage the dependencies of our project and added necessary dependencies into the project. To comply with the source code requirements, we used Java 6 as our language level. For the junit dependency, the version is 4.12.

Thirdly, we successfully built and ran the source code modules in our local machines, and passed all the existing test suites for all the source code modules.

Lastly, we managed to integrate JaCoCo as a plugin in our project and enabled it to generate a coverage report for our junit test code. Later we could use the report in the format of csv to analyse the coverage statistics and use a coverage generating algorithm to calculate the latest coverage.

Our next step is to integrate a RTS to pick those tests based on the modification of the code.