Maintenance Task: Populating the Test-Suite

Our test suite consists of two frameworks:

- In the folder "test/junit" are all unit tests that execute individual methods of classes. These can be run by selecting "Run As → JUnit plug-in test".
- In the folder "test/stf" are all test cases which execute GUI tests (automated manipulation of GUI controls and testing the outcome). These can be run by selecting "Run As → JUnit test".

These test suites are also run regularly by our Jenkins continuous build server (http://saros-build.imp.fu-berlin.de/jenkins/) , which provides detailed information about the test results. As you can see on Jenkins, our code coverage rate is lower than it should be. Your task would be to help increase the coverage by writing new tests.

It is probably not possible in two weeks to make large increases in the test coverage of *all* of Saros. Therefore, you must choose specific areas of Saros to concentrate on. You new tests must include some JUnit tests. Adding new STF tests is a little more difficult and optional (but will help increase your grade if you attempt it).

- Identify which areas of Saros you will increase the coverage for.
- Give justifications why you chose these components. Are they critical components? Are they components that are changed often by the developers and therefore need unit tests more desperately? Do they already have extremely low coverage? (Each component can have different reasons.)
- Add new tests. After adding tests, show what effects this had on the component (e.g. coverage rates, any bugs in Saros identified).
- Tests are only valid if you know how the expected behavior of what you're testing. You should make a note of occasions when the behavior of a method/use case was unclear and how you resolved it.