Group 3 Project Week 2 Deliverable:

Jubula

Jubula is a software testing tool developed by BREDEX, a company that has been designing individual solutions for companies since 1987. Jubula is free to use and can be downloaded as a plugin for Eclipse or can be downloaded as a stand-alone program.

Jubula is a functional GUI testing tool that does not require writing code. It was designed in order to streamline the testing process as well as incorporating best practices from software development to create more easily understood, maintainable, and longstanding tests. Jubula provides testing support for Java and HTML applications. Jubula is a tool designed for the testing phase of software development since it is a black box testing tool that is concerned with the output of the program.

The Jubula standalone tool can be downloaded from the BREDEX testing resources website and the Eclipse plugin can be downloaded in the program itself or through the Eclipse website. Once Jubula is downloaded and installed, the AUT (application under test) must be added to the workspace. Jubula offers support for testing Swing, SWT, RCP, GEF, JavaFX, and HTML based applications.

This tool tests the application from the user standpoint. Jubula has a list of different user actions that includes clicking the mouse, input via keyboard, pressing the enter button, copying to clipboard. You are able to drag and drop these actions to the test step console for each test case. Properties of these actions can be edited to reflect the changes these actions will cause. The example used in the tutorial for using Jubula is a simple adding application. Two numbers are entered into two different text boxes and the Enter button is clicked, and the equal button is clicked to display the result. So in the main console you would drag and drop the appropriate actions (entering text in the two fields, a single click with the left mouse, and checking the result) in the appropriate order. Multiple data sets can be entered for each test case to see the results and determine if the application is working correctly. As with Junit, you are also able to create a testing suite that will run all of the test cases at the click of a button.

Jubula can be difficult to understand and use at first but once you learn how to use it, it eliminates a lot of time for the testing phase because data sets can be entered very quickly, run simultaneously, and it eliminates the use of having to write testing code (which in turn eliminates introducing more errors). Since this testing tools focuses on how the user will see the software, one can learn information on usability, bugs, etc. that one might miss with something like Junit testing.   Jubula is very limited in its programming language support and this tool is also limited to GUI software.