

This week has been focused on testing and creating regression tests. For the visual language, I have been focusing my tests around the output of the system, so the generated java code, and the structure of the custom blocks. I have used a black-box testing method for testing the generated java code, and a white-box method for testing the structure of blocks. This is because the generated code must output correct bots so this depends on the output, and the structure of the blocks works at the core of blockly so white-box testing was necessary for this.

For the testing environment, I am using QUnit to execute our tests. This gives a simple, quick and easy to use environment for testing, and displays results in an easy to understand way.

Currently I am testing the output of each individual block and the default bot that we display to the user. This covers the basic needs of our visual language to make sure it is outputting compilable bots.

Currently the tests cover:

- Java Generation from blocks
- Input and Output Connections of blocks
- The default bot generation
- The input connection type of the nextMove function block

To execute these tests, you only need to open 'tests.html,' located within the tests folder of the blockly library. This will execute the tests and display the results all within the page.