Week 11 Report
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This week I have fixed a bunch of small JS and Java issues, added in a modal for build errors, as well as spending a good few hours creating bots. Considering almost every one I tried to make broke, I think I proved how bad the current state of blockly was,

I also started to implement an automated system for adding bots to a list so they could be all compiled and tested at a later stage, either once issues were resolved, or to make sure that nothing prevents that bot from failing to compile/play a game, however talking to others in the group it seems as if this feature can not be completed (without adding new entrypoints we can't save the bot data) and also we dont have enough time to actually use it properly so it seems pointless, Basically All it does is captures the XML, Java src and The build/blockly errors, and creates a JSON object from them. The way to test would run a fake browser, like PhantomJs, load each bot into the workspace, save each bot to the server, And run a test game making sure all stages passed.

The JS issues included things like not being able to save a new bot twice due to never removing the new flag, and turned the progress bar into a fancy notification bar that shows error messages and build failure notifications. It also can be clicked to show a description of the error if the bar is orange.

The Java issues were to do with the new blocks added. There were some unchecked index out of bounds exceptions, and other instances where what a bot did would return null etc. throwing exceptions. This code was not tested at the the time of these bugs appearing, and if there was tested it could have been avoided.

Since we are dealing with children the goal has been to reduce the possibility of errors by having fallbacks in the Java/Blockly Code, things such as if returning -1 if an index out of bounds exception would be throws, and returning the first valid move if something would return null etc. So that the child can see something unexpected, rather than just a massive failure, as children can't understand errors and exceptions etc. If an error does occur the first thing to do would be to ask a teacher/supervisor what the problem is. Then the teacher/supervisor can click the bar to find out what's wrong.