Developing with the Market Simulator

Overview

Quick Start

This is a quick start guide to checkout and run the repository. These commands should be vaguely understood before executing them.

```
sudo apt-get install openjdk-8-jdk make maven jq git
ssh-keygen
# Do: Email elaine ~/.ssh/id_rsa.pub
git clone git@hft.eecs.umich.edu:hft.git
cd hft/market-sim
make jar
# This next line executes one run of a default simulation
< docs/simulation_spec_condensed.json ./market-sim.sh 1 | jq .
# This next line creates an egta simulation called defaults.zip
make egta def=docs/defaults.json</pre>
```

Dependencies

Below is a list of all of the dependencies followed by their name in standard Ubuntu repositories.

- 1. Java 1.8 (openjdk-8-jdk)
- 2. Make (make)
- 3. Maven 3 (maven)
- 4. Jq (jq)
- 5. Git (git)

Compiling & Common Tasks

Make

There is a Makefile at the root of market-sim that provides targets for most operations you would want to accomplish. Typing make help will display information about all of them.

- jar Compile java into an executable jar that can be called with market-sim.sh, or run-egta.sh This essentially updates the current executable simulator with the current version in source.
- test Run all java unit tests. Make sure that this passes before merging code into a larger branch.
- egta def=<defaults.json> Compile the current jar into an egta compatible zip file. This requires that def be specified. def is the path to the egta defaults.json you wish to use for this jar. It will also be used for the name of the resulting zip file, so make sure that the name of the defaults.json you're using coincides with the desored simulator name.
- **report** Generate and display a number of reports about the java source code. In general this should be free of most of the errors is points out. This should be run before a large code change.
- docs Compile the documentation markdown files into pdfs for easier viewing. clean Remove all java byproducts. This probably won't be necessary, but it exists just in case.

To remove the syntax highlighting add COLOR=cat to any command invocation.

Style

We currently use the Google Style Guide. In the resouces folder there are two files (eclipse-java-google-style.xml and google-style.importorder) to help enforce this style in Eclipse.