

Developing with the Market Simulator

Overview

Quick Start (Ubuntu)

This is a quick start guide to checkout and run the repository. These commands should be vaguely understood before executing them. If you're using mac, most of the `sudo apt-get` commands can be replaced by `brew` using [homebrew](#).

```
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
```

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 desired 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 it 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 `resources` folder there are two files (`eclipse-java-google-style.xml` and `google-style.importorder`) to help enforce this style in Eclipse.