

# 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
```

## 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.

### Style

We currently use the [Google Style Guide](#).