Family Map Server Test Driver Tutorial

Remote Pass-Off Instructions

Purpose

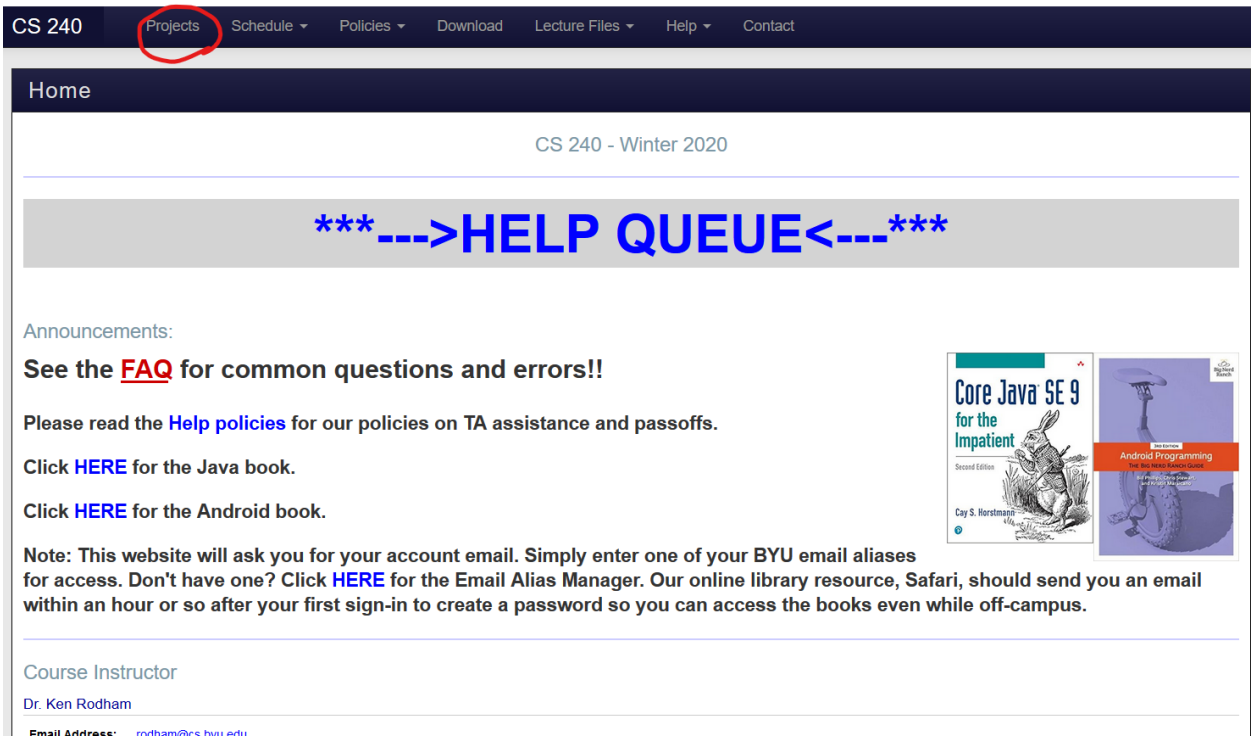
This document will instruct you on how to download and run the test driver for the Family Map Server test driver for a remote pass-off.

System Requirements

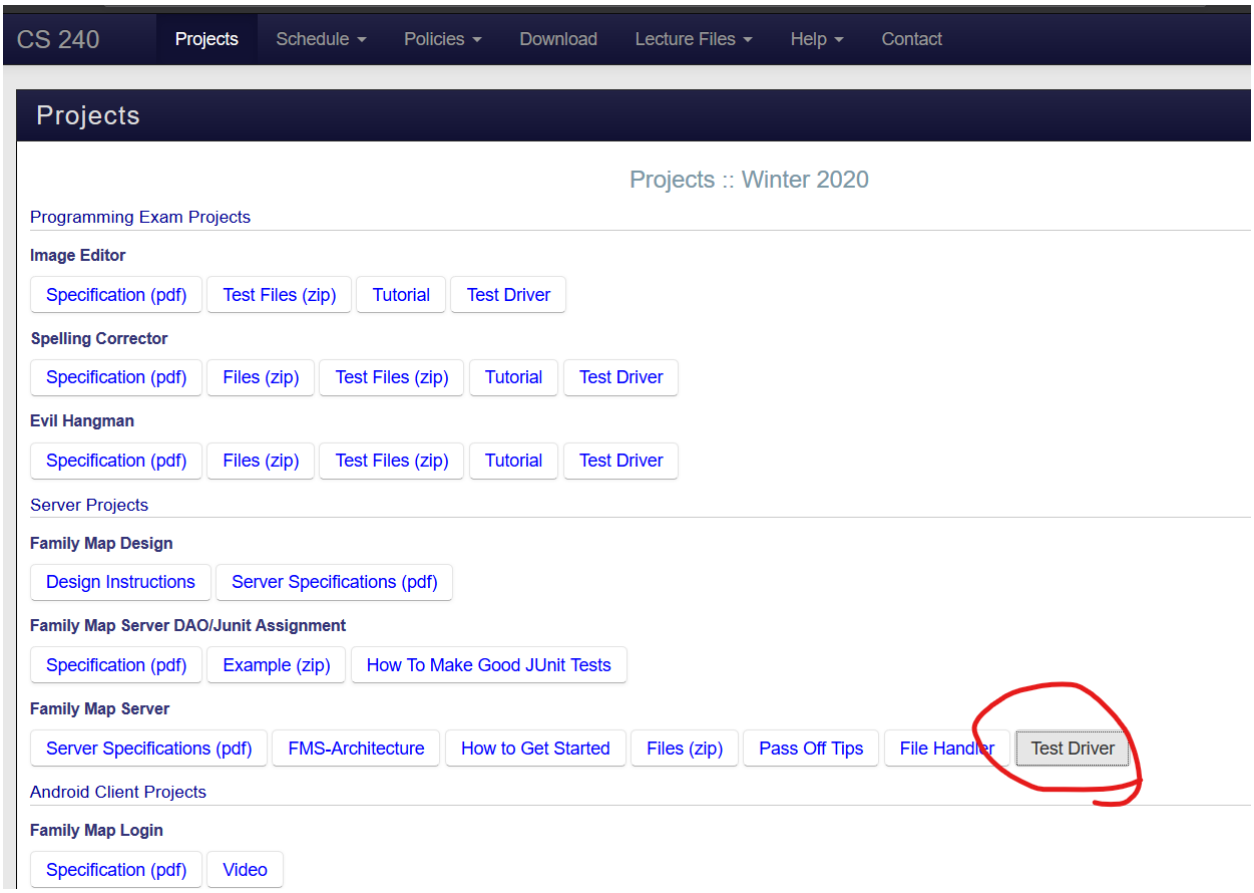
To run this test driver on your own machine, you will need java installed and configured properly. To check if it is installed and configured properly, open the command line (or command prompt if you are using Windows), and just type in "`java`" into the command line. If a usage statement comes up, you are good to go. If an error that says something like the command "`java`" is not found, look at Appendix A at the bottom of this document for more instructions.

Downloading the Drivers

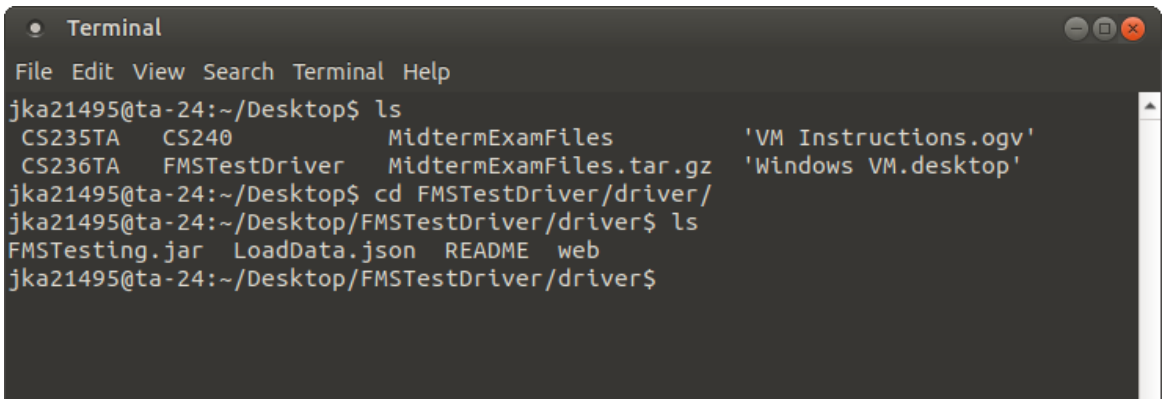
Go to the CS 240 class website and navigate to the Projects page by clicking "Projects at the top of the page.



Once there click on "Test Driver" on in the Family Map Server section.



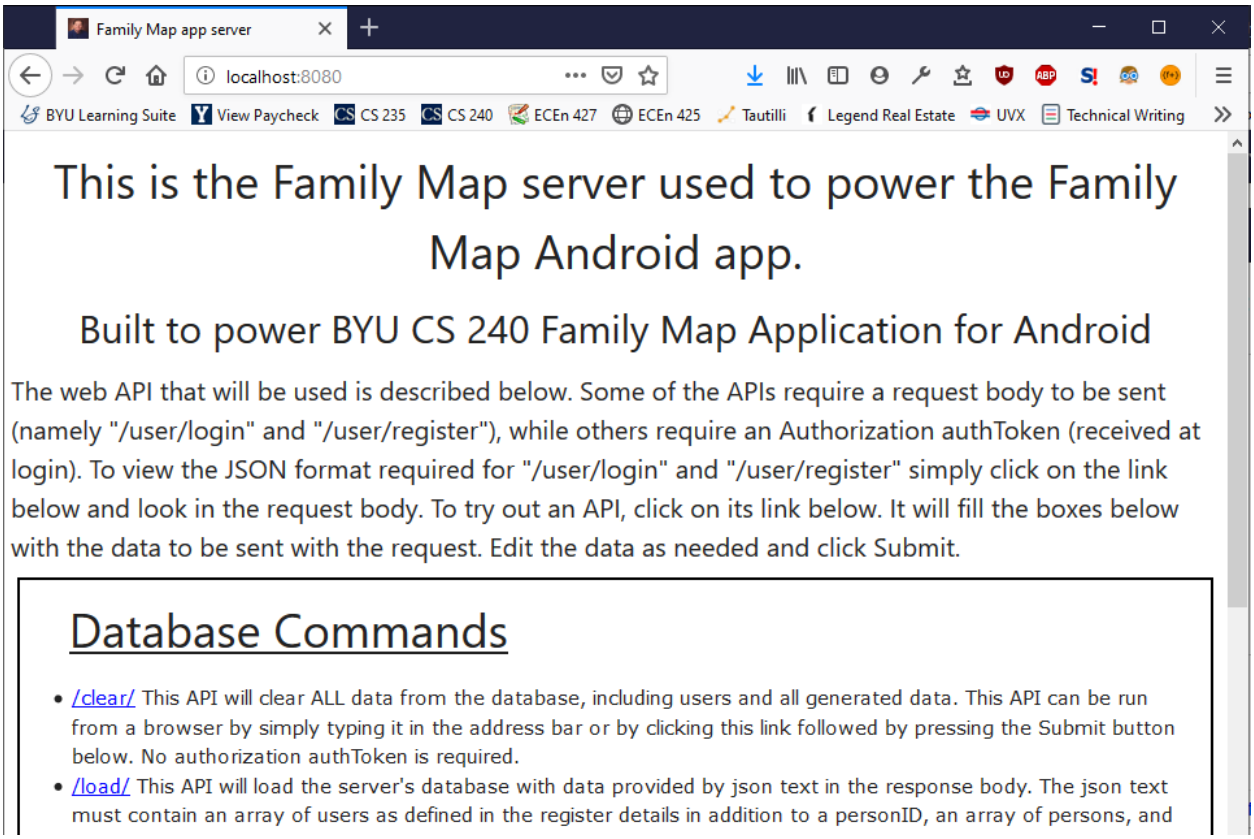
You should then be prompted for where to save the FMSTestDriver.zip file. Save it wherever you'd like. Then extract its content to wherever you'd like. After the extraction, you should have a new folder named "`FMSTestDriver`". Open a terminal or command prompt and navigate to `FMSTestDriver/driver`.



Inside this folder you should see `FMSTesting.jar`, `LoadData.json`, `README`, and `web`, as shown above. Don't modify `LoadData.json` or `web`. If you forget the command to run the driver, you can read the `README` file.

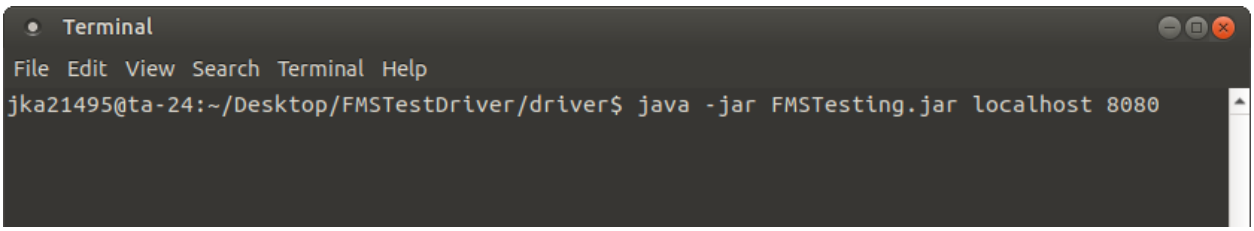
Running the Test Driver

First, make sure that your server is running. You can do this by opening a web browser and typing "`http://localhost:<port>`" in the address. You should see the `index.html` displayed as shown below using port 8080.

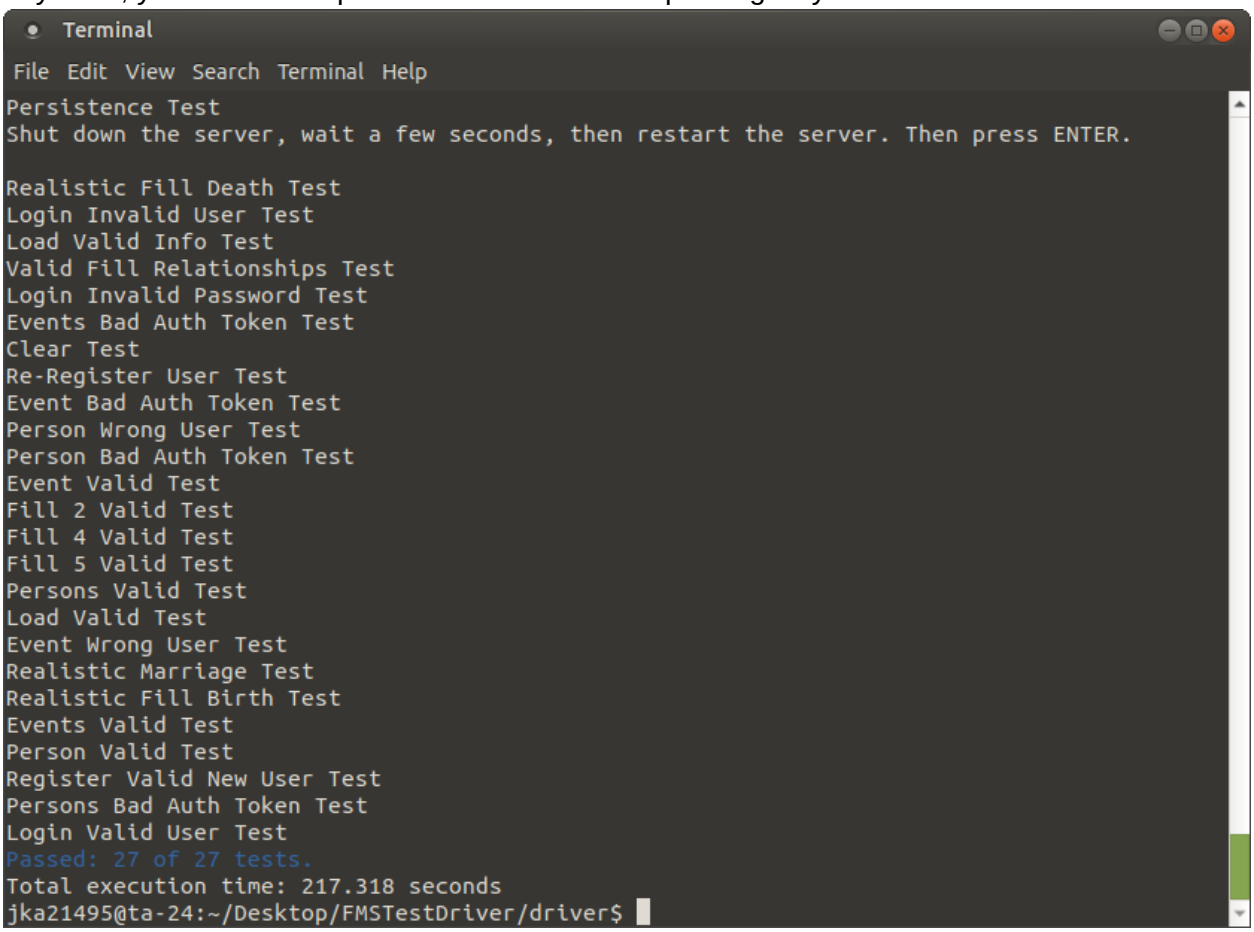


Once you have your server running and a terminal open to the `FMSTestDriver/driver` folder, you are ready to run the test driver. To run the test driver, run the following command: "`java -jar FMSTesting.jar <host> <port>`".

The test driver has been compiled to the jar file FMSTesting. It accepts as parameters the host and port of your server. If you're running the test driver on the same machine as your server, you can replace "`<host>`" with "`localhost`". You should replace "`<port>`" with the port that your server is running on (usually 8080). The command you run might look like the image below.



Usually the first test to run is the Persistence Test. When this test runs, it will prompt you to turn you server off and back on. Once you have done this, press enter to finish the test. The rest of the tests will run without any user interaction. It normally takes one to five minutes to run the tests. If you pass all the tests, you should see an output similar to the below image. If you fail any tests, you will see output for each failed test explaining why it failed.



Appendix A: Setting Up Java

There are two parts to setting up java to be able to run in the command line, installing java and adding java to your system's path variable. If you know that you already have java installed but you are unable to use java on the command line, you will just need to add it to your system's path variable as shown in Part 2 below.

Part 1: Installing Java

Visit this page to download the newest JDK: https://www.oracle.com/java/technologies/javase-jdk13-downloads.html

Windows: Choose to download the "Windows x64 Installer" and run the executable once it is downloaded.

Mac: Choose to download the “Windows x64 Installer” and run the executable once it is downloaded.

Linux: You will probably need the “Linux Debian Package” for any version of Ubuntu, but different versions of Linux might need one of the other 2 versions. Once the .deb file is downloaded, open the file to start the install.

- For all 3 Operating Systems, after the install is done, check to see if running the command “`java`” in the command line returns the usage statement. If not, continue to Part 2.

Part 2: Adding Java to your system’s path variable

Windows: Follow this guide: https://www.onlinetutorialspoint.com/java8/java-8-how-to-set-java_home-on-windows10.html

- Make sure that if you have the command prompt open during this to close the window and reopen it for the change to take effect.

Mac/Linux: Follow the single-user portions of this guide for either OS: https://www.baeldung.com/java-home-on-windows-7-8-10-mac-os-x-linux

- Make sure that if you have the command prompt open during this to close the window and reopen it for the change to take effect.