Getting Started with Docker

November 13, 2021

1 Prerequisites

- 1. A laptop running either MacOS or Windows 10 version 1903 or higher. For Windows users: You can check your version number by going to Settings \rightarrow System \rightarrow About.
- 2. At least 10 GB of free hard drive space.

2 Setup

- 1. (For Windows users only) Enable WSL2 (Windows Subsystem for Linux 2) and clone the stat-471-fall-2021 Github repository into WSL2 via git clone https://github.com/Katsevich-Teaching/stat-471-fall-2021.git. See video for details.
- 2. Download and run Docker Desktop.
- 3. Open a Terminal (for Windows users, this should be in your Windows Terminal in the Ubuntu 20.04 tab) and navigate to your stat-471-fall-2021 directory.
- 4. Type docker pull ekatsevi/stat-471 in your Terminal and press enter. This will start a download that may take a few minutes. You'll only need to carry out this step once.
- 5. Type docker-compose up in the Terminal and press Enter.

3 Usage

- 1. Open Docker Desktop.
- 2. To start your Docker container, navigate to Containers/Apps, locate stat-471-docker-env, and click the "Play" icon if it is not already clicked.
- 3. Open a web browser and navigate to localhost:8787.
- 4. You should see an RStudio window in the browser; use it as usual.
- 5. When you are done, navigate to Containers/Apps, locate stat-471-docker-env, and click the "Stop" icon.

4 Acknowledgment

Many thanks to Da Kuang for leading the effort to implement Docker for STAT 471.