

Operating System Simulator CMSC312 Fall 2018

For
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DEVELOPMENT ENVIRONMENT

The Operating Systems Simulator (The Simulator) constructed for CMSC312 Fall 2018 term at VCU was developed in C++ using QT Creator version 4.7.2 and deployment configuration KIT QT 5.11.2 MinGW 32 Bit.

The Simulation was developed and tested on two platforms and operated as within tolerances of expected operation on both. Both platforms were used for development as well as testing.

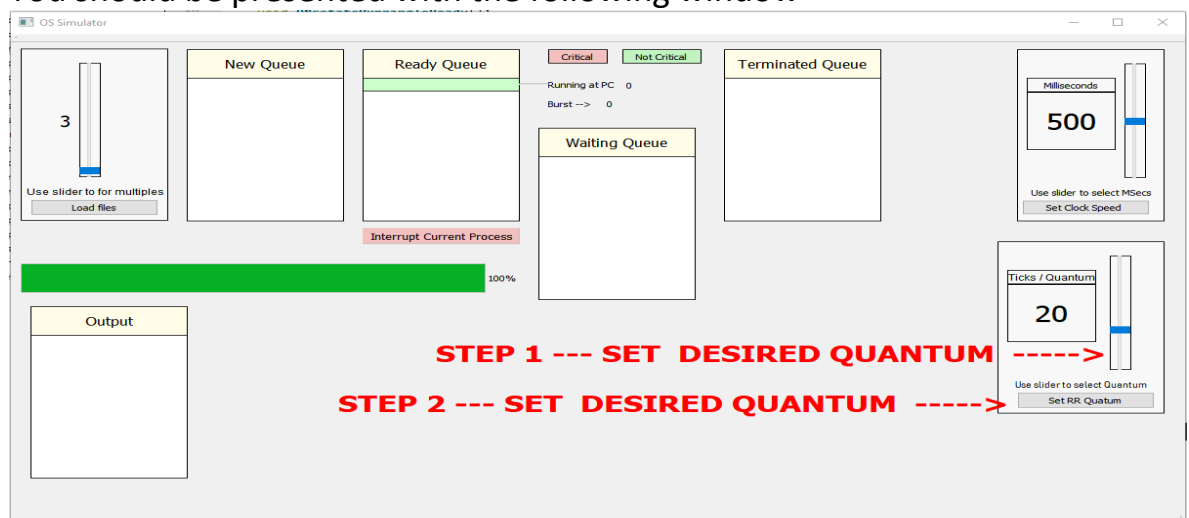
Platform 1. 64 Bit Intel Core i3-3220 CPU @ 3.30 GHz with 16.0 GB installed RAM. OS was Windows 10 PRO version 1803

Platform 2. 64 Bit Intel Core i7 MacBook Pro11,1 @ 2.8GHz with 8GB installed RAM. OS was macOS Mojave version 10.14.1

HOW TO OPERATE THE SIMULATION

The Simulator is designed to be intuitively operated. The following steps are provided:

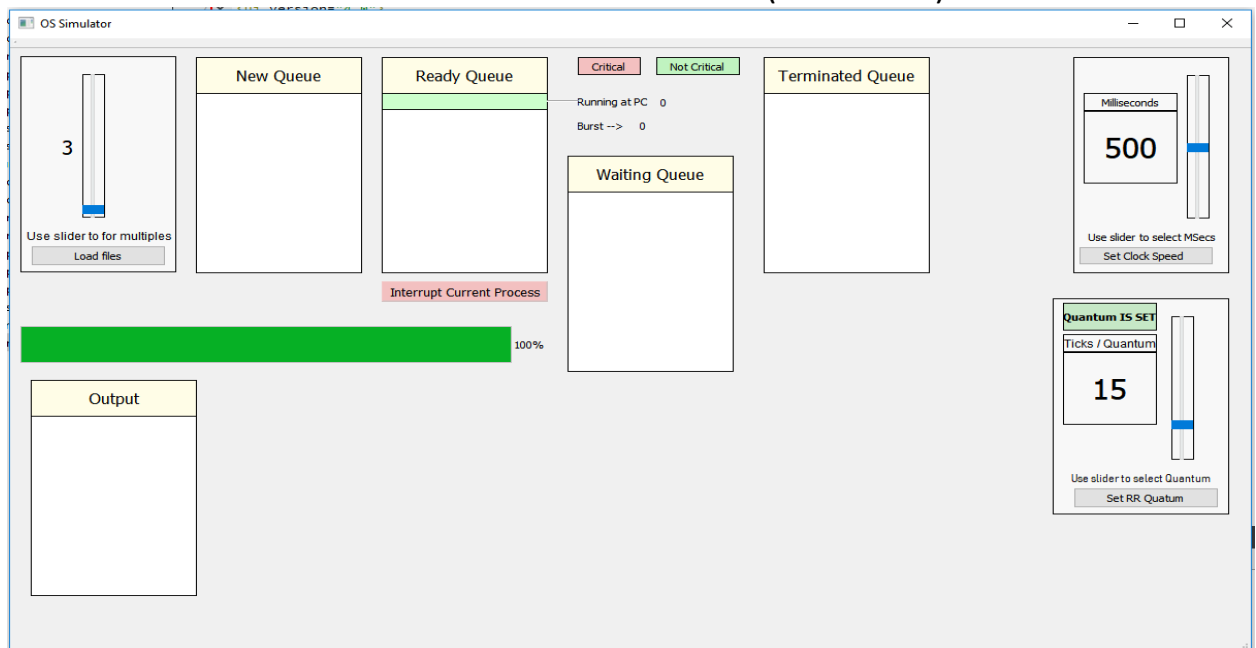
1. Install and configure QT Creator.
2. Open the file called CMSC312Stallings.pro
3. Compile and Run
4. You should be presented with the following window



5. Use the slider (Step 1) to perform an (optional) selection of the desired Round Robin quantum (modifies default).
6. Confirm your Round Robin Quantum selection (Step 2)



Your window should look like this after the above (OPTIONAL) selections



7. Load JSON files from Resources folder provided. (You may load many of the same file using slider to select quantity)
8. After files are loaded, set desired clock speed to slow or speed up simulation.
9. Press Interrupt button to send a User originated interrupt.