CS 144
Advanced C++ Programming
Spring 2019
Instructor: Ron Mak

Assignment #8

Assigned: Tuesday, March 26
Due: Tuesday, April 9 at 8:30 AM
Canvas: Assignment 8. Install wxWidgets
Points: 100

Install wxWidgets
For Assignment #9, you will write a GUI-based program in C++. Therefore, for this Assignment #8, you will download, configure, and install the cross-platform **wxWidgets** package for developing programs with graphical user interfaces.

You will also install the **VirtualBox** virtual machine manager, and then the **Ubuntu** variant of the Linux operating system in a virtual machine managed by VirtualBox. Your host machine operating system can be either Windows 10 or MacOS X. Then you will install wxWidgets on top of Ubuntu.
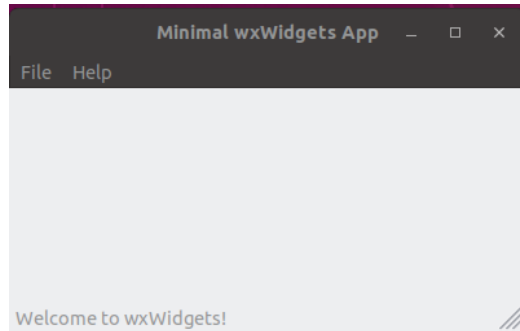
- VirtualBox: https://www.virtualbox.org/
- Ubuntu: https://www.ubuntu.com/download/desktop
- wxWidgets: https://www.wxwidgets.org/

Note: Windows 10 has a new option to install Linux as a subsystem. That won't work for this assignment because the subsystem is only text-based.
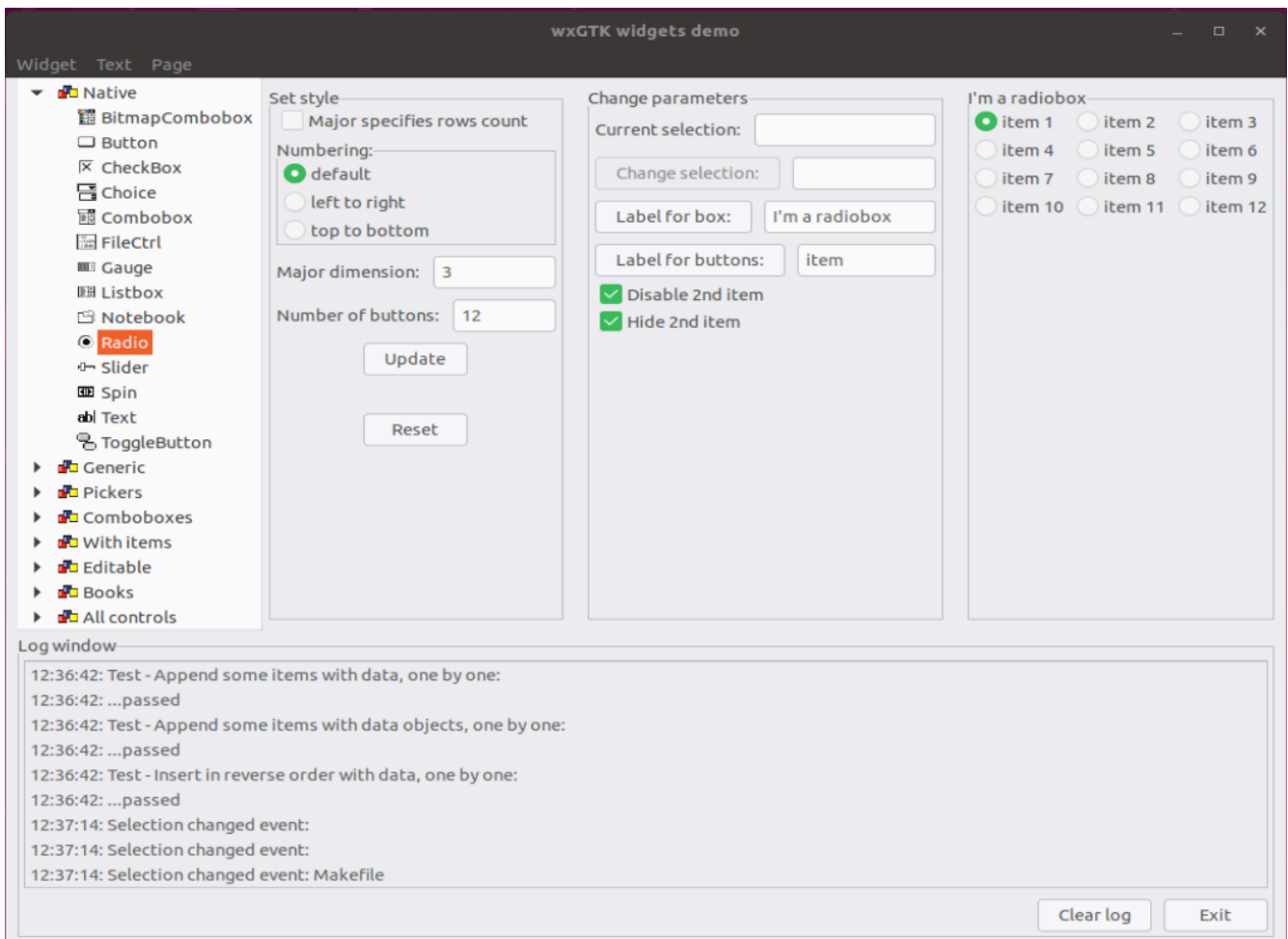
If you already have Ubuntu on your computer (such as via dual booting), then you don't need to install VirtualBox.

Sample wxWidgets programs

After you've installed wxWidgets, build all the sample and demo programs. Make sure you can run the **minimal** sample program. Make a screen shot:

Then run the **widgets** sample program which includes all the widget controls. Make a screen shot, for example:

Tutorials
See http://www.cs.sjsu.edu/~mak/tutorials/index.html. The pertinent ones are

- InstallVirtualBox.pdf
  Install the VirtualBox virtual machine manager on a Windows 10 platform, which will allow us to run the Ubuntu operating system in a virtual machine.

- InstallUbuntu.pdf
  Install Ubuntu 18.10 in a virtual machine managed by VirtualBox. Ubuntu is a popular variant of the Linux operating system.

- InstallwxWidgets.pdf
  Install the wxWidgets on the Ubuntu platform to allow us to build and deploy interactive GUI applications. Ubuntu can be running directly on physical hardware or in a virtual machine.

Rubric
Your program will be graded according to these criteria:

Criteria	Max points
Screen shot of sample program **minimal** running on Ubuntu.	50
Screen shot of sample program **widgets** running on Ubuntu.	50