MATLAB Programming   NCTU   Fall 2017   LAB#9   2017/12/4
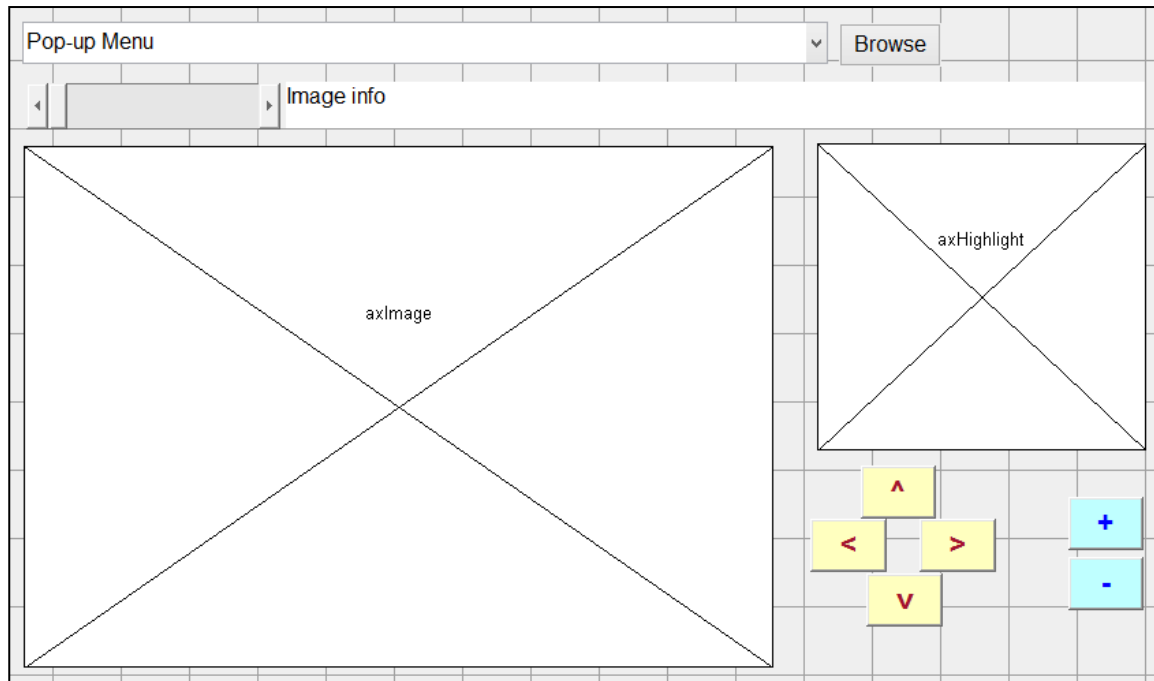
In this lab, you are going to build a MATLAB GUI program. We will use the same task as in assignment #3, that is, a picture viewer. But here we will create a GUI for is similar to what we did last week. With a GUI, it is more convenient as the user does not need to remember all the commands.

The GUI should look like this within GUIDE:

Regarding the GUI objects:

- There are two axes: Left: the image itself; Right: the highlight region. As in the assignment, their sizes are fixed.

- Use the "**Browse**" **pushbutton** to select the folder. It should bring up the folder selection dialog box (use `uigetdir`). Once the selection is made, add the full path to the **popup menu** if it is not already there. (Note: The content in a **popup menu** is in its `String` property, which contains a cell array of strings.)

- The user can also select a path that is already in the **popup menu**.

- Use the **slider bar** to move between the files. Disable the **slider bar** if no image file is found in the folder. Use the **static text** next to the **slider bar** to display the file information as specified in the assignment.

- Use a set of 4 **pushbuttons** to move the highlight region around. Use the **static text** above it to display the radius. Use two more **pushbuttons** to increase and decrease the size of the highlight region.

- In order to retrieve the locations of mouse clicks, add the `WindowButtonDownFcn` callback (an event of the figure itself) from GUIDE. You then can get the position within an axes as in the previous lab.