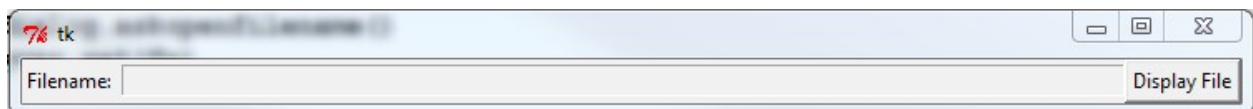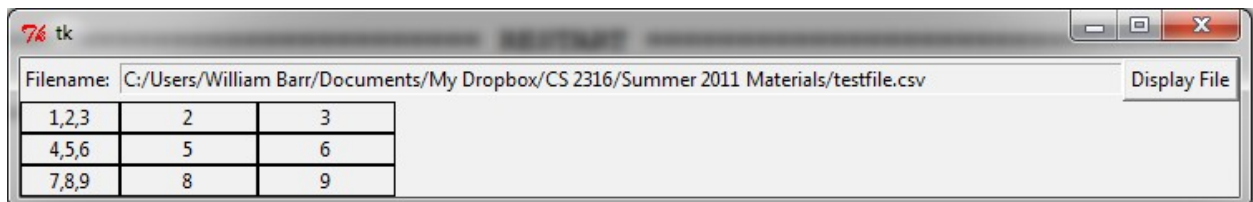# CS 2316 Timed Lab 2 – Summer 2011

# CSV Display GUI

## Out of 30 points

The objective of this timed lab is relatively straight forward: you are to write a GUI that will display the data in a CSV file inside of a Python GUI.  You want to maintain the formatting of your CSV file as much as possible, so you will be displaying the data as rows and columns, just as you would see it in a program like Excel.  When your program is first launched, your GUI should look like the following:



In this GUI, note that the entry box in the middle between the label and the button is of width 100 and columspans is readonly.  When the user clicks on the Display File button, you should launch an askopenfilename dialog box.  The user will select a CSV file from this box.  Note that it will be a valid CSV file and that you should not attempt to remove anything from the filepath.  Once the file is selected, you must display the elements in the GUI as follows (This particular sample is using testfile.csv):



In the above GUI, elements are arranged in a grid, starting on row 1 of the GUI. There is a border width of 1 around each cell with a relief of SOLID.  Also note that in order to make all the cells show up, you will need to sticky in multiple directions to make the cells in each row/column look uniform, as displayed above.

Note that you are NOT expected to have your GUI run more than once (i.e. the user will not push "Display File" again and expect it to erase everything.  You are required to use a class, but you may complete the assignment however you wish, so long as you use a class for your GUI.

You are not guaranteed to receive a file with the same number of rows and columns.  Below is a sample using the courseTimesLarge.csv file:

## Grading:

| | |
|---|---|
| **Initial GUI Displays correctly** | **+4** |
|     **Label displayed correctly**   **+1** | |
|     **Entry displayed correctly**   **+2** | |
|     **Button displayed correctly**  **+1** | |
| | |
| **File Dialog box (askopenfilename) properly used** | **+1** |
| **Correct file opened (File path not tampered with)** | **+3** |
| **CSV File correctly read in** | **+6** |
| **File closed after use** | **+1** |
| **Widgets able to be added after __init__** | **+2** |
| **Items added to GUI are added in correct location** | |
| **+6** | |
| **Items have correct border, and cells are correct size** | **+5** |
| **Program can handle CSV Files with non-equal numbers of rows/cols** | **+2** |
| | |
| | |
| **Total:** | **30 pts** |

**Extra Credit:**

Find the maximum number of columns in your longest row and pad all other rows with empty cells so that all rows have an equal number of columns. +1 bonus point on this timed lab.