## How to Use the G rid

Normally, if we have a widget called foo, we use foo.pack() to make it appear in our Tkinter window. This works fine when we either have very few widgets or we don't care about the placement of our widgets. If we want to put our widgets in specific places, we will need to use foo.grid(...).

If we want our window to look like this...



...packing our widgets will not help us. We need a grid.

The first step of using the gird is creating an imaginary grid across your GUI, like this:



Then, when we are done creating our widgets, we put them into the root using the grid method. The grid method takes row, column, rowspan (height), and columnspan (width) as options. The code required to write this GUI looks like this:

```
from Tkinter import *

root = Tk()

fooButton = Button(root, text = "foo")
fooLabel = Label(root, text = "bar")
fooEntry = Entry(root)

fooButton.grid(column = 0, row = 0)
fooLabel.grid(row = 0, column = 1)
fooEntry.grid(row = 1, column = 0, columnspan = 2)

root.mainloop()
```

Note that at no stage did we tell Tkinter that we wanted a 2x2 grid or how large to make each row and column. It calculated that for us. If we were to have put fooEntry in the 99<sup>th</sup> row instead of the 1<sup>st</sup>, it would have created a hundred rows instead of two (98 of those rows would have been 0 pixels high, though!)