

Project Goals:

- Introduction to using the course graphics module.
- Practice with Objects and Object-Oriented Programming.
- Develop and utilize Graphical User Interfaces.

A. *Shapes*: Recreate the graphing window from Shapes, with five shapes. The window is 600x400 pixels, and each shape has a 50-pixel border of clear space around it with respect to how the window is divided (in half on the top half, and in thirds on the bottom half). All shapes and boundaries can be any color, and in any configuration. Each shape's boundary should be 5 pixels.

**[Submission of #2A as a picture (screen shot okay) to Canvas course page, Project_2A]
[5 pts]**

B. *Miles Converter GUI*: Create a Graphical User Interface for converting Miles to Kilometers. The interface should:

- Utilize an Entry box for the input, and wait for the user to click on the window after entering their number of miles.
- Convert miles to kilometers, and display output rounded to two decimal places.
- Display a "Click to Quit" message that closes the window upon receipt of user click.
- Emphasis on good graphics, spacing and design of GUI
- You must use 3-5 unique variations on your GUI for full credit.

[Submission of #2B as a .py file to Canvas course page, Project_2B][7 pts]

C. *Greeting Card*

Create a graphing window that asks the user to input their name from an entry box and, after a "click to start" prompt, closes that Window and opens a Birthday or Holiday Greeting Card. The card should be personalized (i.e. say the person's name, "Happy Birthday John!!!").

Utilize definite loop(s) to generate borders for each window, consisting of a pattern containing of 3 (or more) shapes repeated.

Decorate the card appropriately for the occasion.

Colors and style are left to you, but again I will be looking for 5 (or more) unique characteristics.

[Submission of #2C as a .py file to Canvas course page, Project_2C] [8 pts]