# Lab 11: Click Event – Functions - Click to draw vehicles

Academic Honesty

* The work you turn in is to be your work, not copied from someone else, from the web, or generated by a program.
* Never allow anyone access to your files.
* Never give anyone your password.
* Never share your USB memory or email your files to anyone else.
* Never give anyone a printed copy of your file or an electronic copy.
* Never allow anyone to copy your work.

Purpose

This lab will let us practice creating functions, and calling them on user click.

## Functionality

* When the user clicks the screen you will randomly draw one of the following, centered around the coordinates of the user click:
  + Tree
  + Boat
  + Car
  + Truck

## Implementation

* Create functions to draw the four different vehicles at the specified x and y coordinates
  + Each time the user clicks, you will first have to randomly decide which vehicle to draw
  + Then you can call the appropriate function.
* When the user clicks the screen, call the function and pass it the x and y coordinates.

## Reuse

* You can certainly reuse the code you used to make these shapes in earlier labs; however, you will have to put the code in functions and make it relative to the user clicks.

## Random size

The basic implementation can earn you up to 90%. For the other 10% you will also implement random sizing. Meaning that each time the user clicks they will get a random sized object. Please make your scale reasonable, e.g. not too small and not too large. E.g. your object should easily fit in the screen, and be visible to the human eye (easily).

## Submitting your files

* Copy your .py file and move it to your X:\101Labs directory for grading.
* Make sure your file is named Lab11XY.py where XY are your initials
* Print your code, and submit it to your lab instructor at the beginning of your next lab class.

## Grade Breakdown

|  |  |
| --- | --- |
| **Points** | **Expectation** |
| 10% | Comments, listing program, your name, and explaining the code |
| 20% | Correctly creating the randomize function |
| 60% | Correctly creating the functions to draw each shape. |
| 10% | Randomizing shape sizes |