# Shape Canvas

It’s time for us to play around with layout elements and events.

**Requirements:**

* Create a GUI with a “play area” and a “control area”
  + Play is to the left and takes up 65% of the interactive space
    - This area needs to be a Canvas element
  + Control is to the right and takes up 35% of the interactive space
  + These areas should have distinct color backgrounds to indicate where one ends and the other begins.
* When the user left-clicks (aka “taps”) the play area a shape is added at that point with the *center* of the new shape positioned on the click/tap location
  + Each shape will randomly be a Rectangle or an Ellipse
  + Each shape will have a random height (within reason)
  + Each shape will have a random width (within reason)
  + Each shape will have a random color, where the Alpha is 255, but the RGB settings are randomized (between 0 and 255)
* Right-clicking (aka right-tapping) an existing shape removes that specific shape from the play area
* The control area will have a single button called “Clear”
  + Clicking the Clear button removes ALL shapes from the play area

# What you’ll need

* Events & Event Handlers
* The Shape, Rectangle, and Ellipse classes
* SolidColorBrush, ColorConverter, and Color classes
* Canvas and other layout elements
* Button element

# You should check out

* Creating Color objects
* Tap events and Tap Event Args

# Rubric

(20 points) Visibly distinct play and control areas with correct proportions

(30 points) Play area adds a random shape on left click

(20 points) Each shape added appears centered on the click location

(20 points) Right-clicking a shape removes it from the play area

(10 points) Control area has one button that clears all shapes from the Play area