Object Analysis and Overview

Class:

* drawingSpace

Purpose:

* To provide the user with a drawing space that will output drawn graphics onto the screen with user input from the mouse.

Instance Variables:

* Self.username
  + The username of the person currently using the program.
* self.LkeyStatus
  + The status of the left mouse key (is it pressed or unpressed?)
* self.RkeyStatus
  + The status of the right mouse key (is it pressed or unpressed?)
* self.xCoor
  + The x-coordinate of the mouse’s current location.
* self.yCoor
  + The y-coordinate of the mouse’s current location
* Self.master
  + The master Tkinter window
* Self.brushwidth
  + The width of the brush that the user is using to draw.
* Self.eraserwidth
  + The width of the eraser that the user is using to erase.
* Self.brushcolor
  + The color of the brush that the user is using to draw.
* Self.backgroundcolor
  + The color of the canvas that the user is drawing on.
* Self.photonumber
  + The photo index number that is important for naming when saving images.
* self.drawingSurface
  + The canvas that the user draws on.
* Self.menubar
  + The horizontal menu bar
* self.mainMenu
  + The main drop-down list for tools
* self.brushThicknessMenu
  + The menu choices for brush thickness
* self.eraserThicknessMenu
  + The menu choices for eraser thickness
* self.brushColorMenu
  + The menu choices for brush color
* self.backgroundColorMenu
  + The menu choices for background color

Function Definitions:

* clear(self)
  + Clears the canvas that the user is drawing on
  + Outputs fresh canvas
* save(self)
  + Saves the current drawing on the canvas
  + Outputs an image file to program folder.
* photoSnap(self,widget)
  + Takes a screenshot of the current drawing using PIL library.
* brushThickness(self,width)
  + Changes the brush thickness
* eraserThickness(self,width)
  + Changes the eraser thickness
* brushColor(self,color)
  + Changes the brush color
* backgroundColor(self,color)
  + Changes the background color
* LkeyUp(self,event)
  + Records when the left mouse key is up
* LkeyDown(self,event)
  + Records when the left mouse key is down
* RkeyUp(self,event)
  + Records when the right mouse key is up
* RkeyDown(self,event)
  + Records when the right mouse key is down
* editCanvas(self,event)
  + Edits the canvas based on drawing and erasing inputs
* logOut(self)
  + Logs the user out of the program and returns to login screen
* instructions(self)
  + Displays an instruction window to the user

Class:

* LoginScreen

Purpose:

* To provide the user with an interface to login. This is for the sake of security.

Instance Variables:

* Self.master
  + The Master Tkinter window for the login screen
* Self.label\_1
  + Username label
* Self.label\_2
  + Password label
* Self.label\_3
  + User and Password Location label
* Self.entry\_1
  + Username Field
* Self.entry\_2
  + Password Field
* Self.loginButton
  + Button for logging in

Function Definitions:

* login(self)
  + Logs the user into the program and displays main program.