"""
CS 108 Final Project

This model game allows the user to predict color by giving a clue.

@ author: Blessing Amoah (bsa5)
@ author Partner: Brad Sinare (bs48)
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"""

Each box is colored with one of the possible colors to predict.

Color Predictor Game

Welcome to Color Predictor! Predict the color.

[grid drawing]

[text field] | Predict | | Call it a day | | Quiz |

Clue: The color starts with G.

TextBox
The place where the user will type the color.

letter G was used as an example of how the clue model is like.

GUIZERO

Predict.py

Import   randint   from random

Class Predict
   This will contain   the   Predictor colors.

   def __init__ (self, color_)
   This will help reset to a new color.

Color Predictor
   This will implement the game model for the predictor.
   def __init__ (self, filename)
   This will   reshuffle the colors from the file.

   def   reset (self)
   Picks a new color &, reset the color file.

   def   set_predict (self, pre_dict)
   This   will be used for the testing purpose and set a
   non-random prediction.

   def   get_ans (self)
   The user gets the answer for the color predicted
   correctly or wrong.

   def   get_clue (self)
   This gives clue of the color to predict.

   def   check_ans (self, correct)
   This determines if the given answer is correct.

gui.py

From guizero import App, Text, TextBox, PushButton, Box, Picture
From predict import Predictor.

Class ColorPredictor
    This is the GUI color predictor game.

    def __init__ (self, app)
    This creates the color Predictor GUI app.

    def predicts (self)
    This process the user input - if it's correct it will
    move on to a new color.

    def admit_button (self)
    The user admits that he or she cannot predict
    that color.
    It will show the name of the color.
    Reshuffle the colors again
    Gives the user another chance to predict
    a new color.

Predict_test.py

from predict import Predictor

Predict = Predictor ('color.text')
This will open the color file.
Predict. set_predict (0)
This will use the set method to check the color.

assert predict.get.ans() == any color in ''
This will check if the color is correct in the shell.
Print ("all tests pass....")
This will print if all is true if not it will print error..

Phased Implementation Plan.

* Add additional features to the predictor class and gui model like time span to predict.
* Modify the game by making it more complex.
* Implement a test model, so that without quizero one can still play the game on the shell.