Guess the number Game

- The game is Guess the number, but the format and rules are slightly different.
- There is a referee who will guess a number. You and the computer have to guess a number in the range of Number*10 and Number*10+10.
- Whoevers Guess was closer to the referee wins!

ML Backend and Intelligence Part

- The game makes use of a deep neural network which is trained on MNIST dataset to classify the digits
- When you enter the name of the number the program will associate it to the image file path of the number and then the image of the number is predicted to guess the number.

Program Backend:

- The prediction of the from the ML model is used to calculate the range of Number*10 and Number*10+10.
- The guesses of the referee and the computer are randomly chosen from this range
- To calculate how far your and the computer's guess are from the referee's guess, the magnitude of the difference is taken into consideration.
- This magnitude is compared and used to output the computer's responses.

The Responses by the computer:

- If you win:"`Aww I lost, You won, your guess was closer to the referee. How do you do this,you're really smart at guessing.you could become an expert`
- If Computer wins:"`Yay I won, my guess is closer! Good job thinking you'd fancy beating me but I proved you wrong.You see, humans can make errors, not me since im trained to play by the rules every time.Better luck next time!`
- Tie:"`Yay, we both made the same guess, good job partner`"

GUI:

- The GUI makes use of a **custom button [PLAY]** which upon clicking fires the whole program.
- It includes 2 text boxes as inputs:
    1.one for entering the image file path
    2. the other to enter your guess
- It includes 3 text boxes and 1 image as outputs:
    1.the image that you uploaded
    2.Referee's guess
    3.Computers guess
    4. Computers response

Notes:

- Your image file must be of PNG format
- The picture must be saved in the format of "NUMBER.PNG" (number must be all caps)
- It should be uploaded in /content section of Google colab
- There are 2 sample images provided in submission