T1A3 Terminal Application

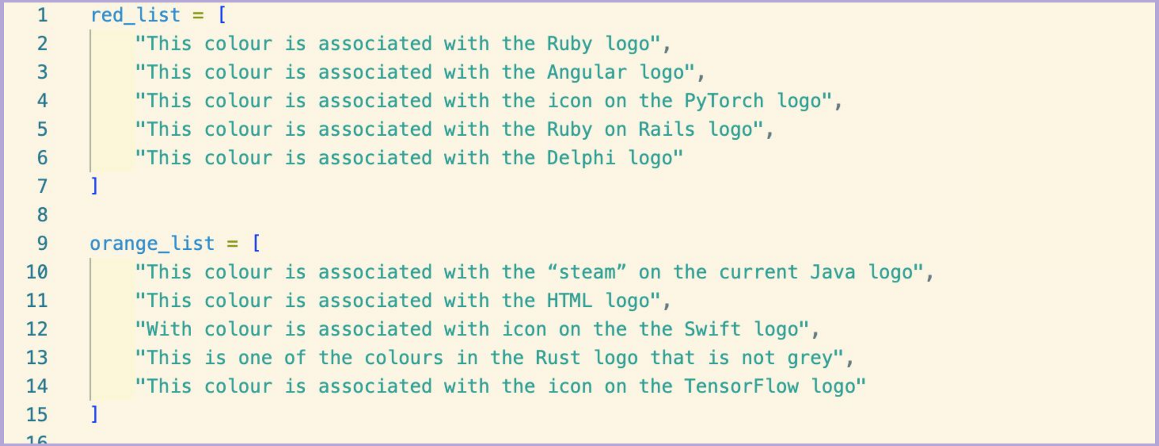
Guess the logo/icon colours!
Emma Holt

Purpose

- The purpose of this application is to be entertaining and to practice the Python skills we’ve been learning this term as well as using Bash scripting.

Challenges

- Python has been a struggle!
- Getting the functions to work with each other has been challenging.
- Importing different files into each other is still a work in progress.
- Understanding the best data type to use (for instance, the lists that store the hints vs a dictionary).



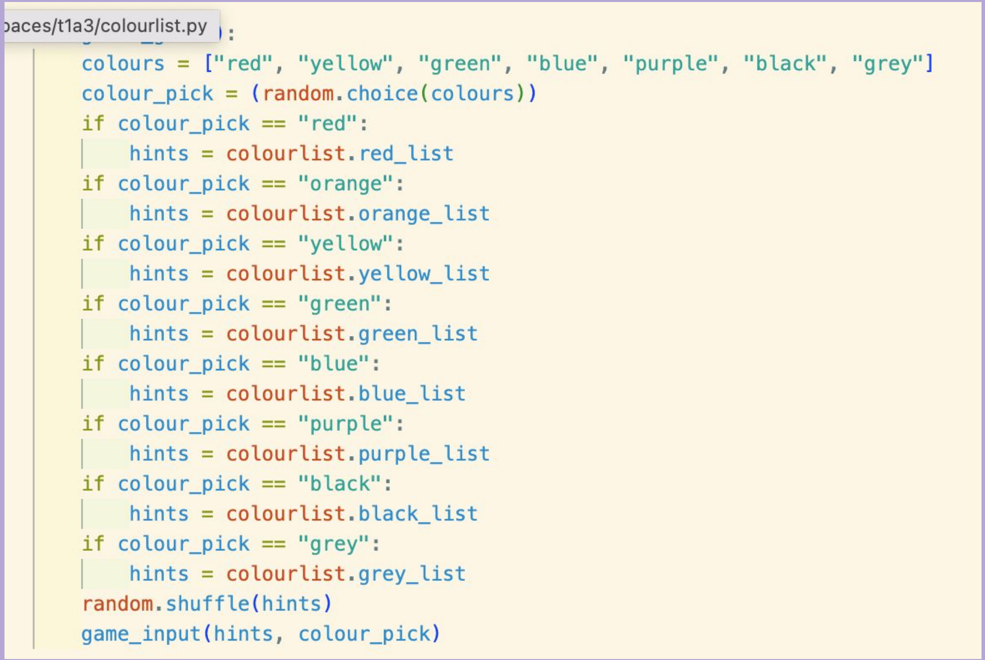
```python
red_list = [
    "This colour is associated with the Ruby logo",
    "This colour is associated with the Angular logo",
    "This colour is associated with the icon on the PyTorch logo",
    "This colour is associated with the Ruby on Rails logo",
    "This colour is associated with the Delphi logo"
]

orange_list = [
    "This colour is associated with the “steam” on the current Java logo",
    "This colour is associated with the HTML logo",
    "With colour is associated with icon on the the Swift logo",
    "This is one of the colours in the Rust logo that is not grey",
    "This colour is associated with the icon on the TensorFlow logo"
]
```

Ethical Issues

- Where icons come from?
- If not official, how used?
- Vision impaired or colourblind folks?

Favourite parts

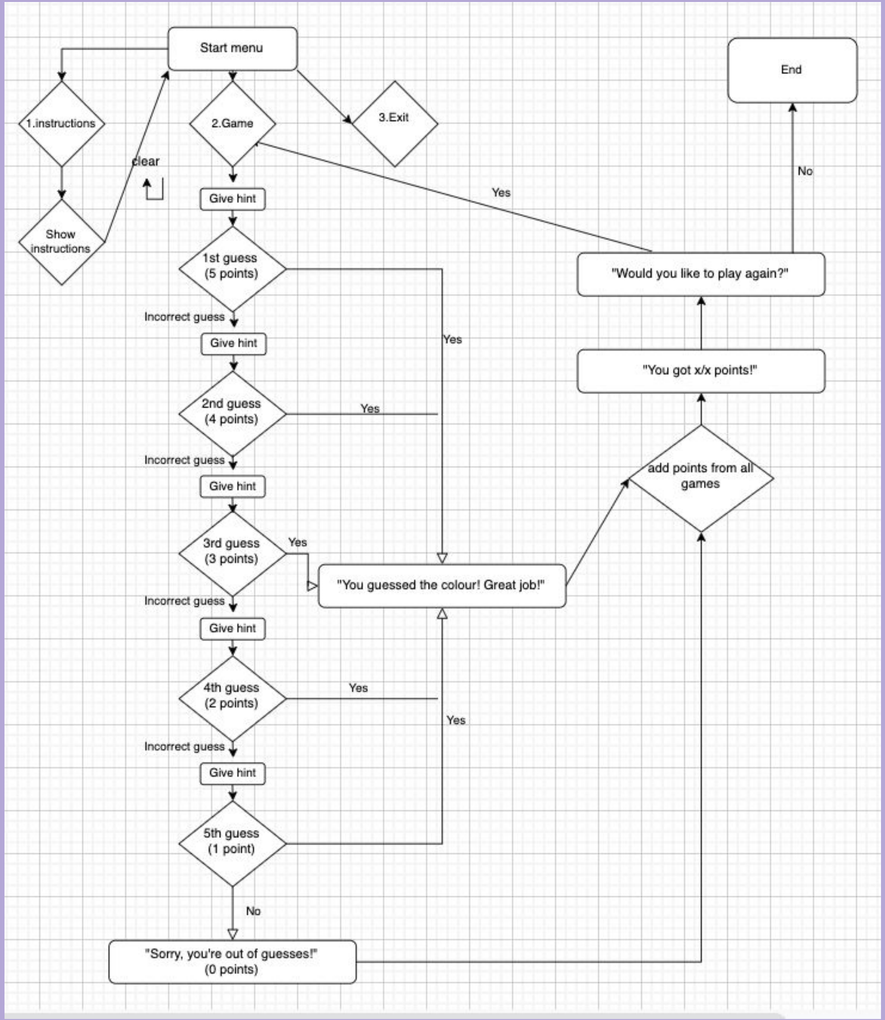
- The feeling of satisfaction when things actually work!
- Setting up the hints and colour choosing function.



```
):
    colours = ["red", "yellow", "green", "blue", "purple", "black", "grey"]
    colour_pick = (random.choice(colours))
    if colour_pick == "red":
        hints = colourlist.red_list
    if colour_pick == "orange":
        hints = colourlist.orange_list
    if colour_pick == "yellow":
        hints = colourlist.yellow_list
    if colour_pick == "green":
        hints = colourlist.green_list
    if colour_pick == "blue":
        hints = colourlist.blue_list
    if colour_pick == "purple":
        hints = colourlist.purple_list
    if colour_pick == "black":
        hints = colourlist.black_list
    if colour_pick == "grey":
        hints = colourlist.grey_list
    random.shuffle(hints)
    game_input(hints, colour_pick)
```

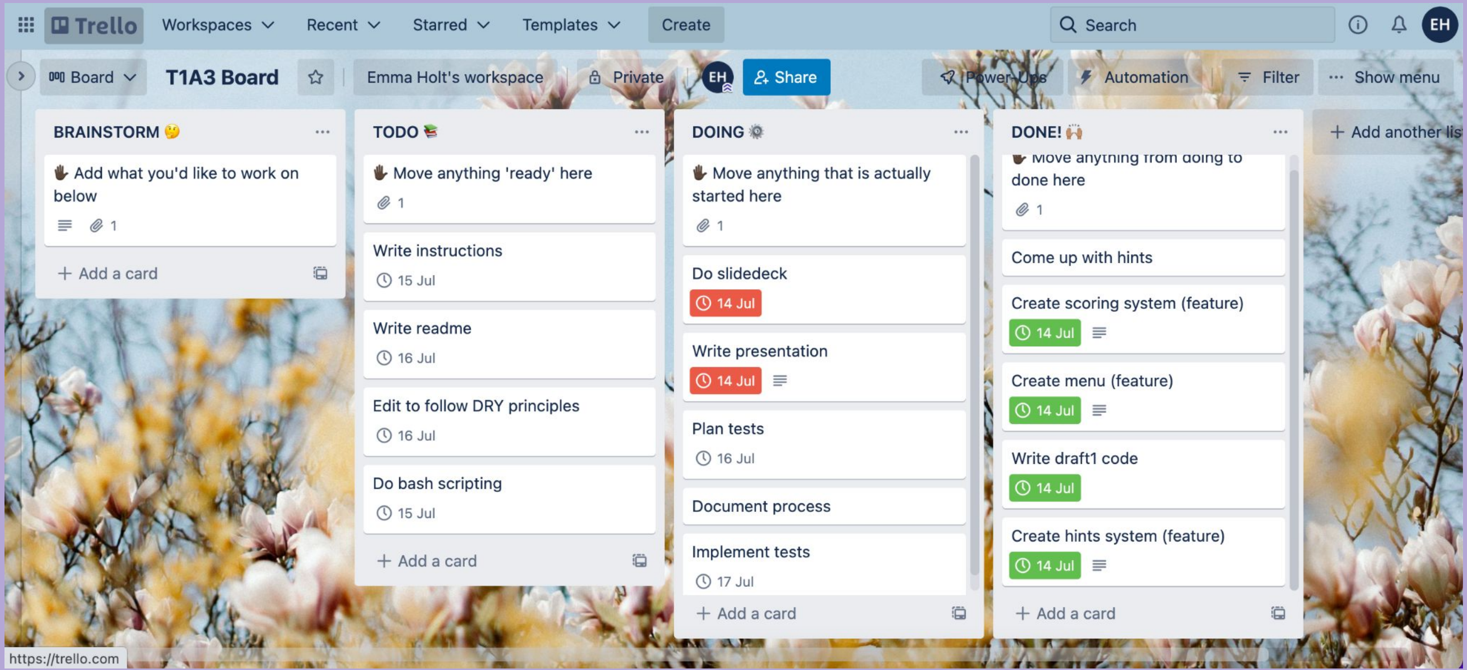
Structure

- General flow of the game
- Flow charts are not my strength



Management

- Used Trello to plan
- Then kept forgetting it existed



BRAINSTORM 🤔

- ✋ Add what you'd like to work on below — 1
- + Add a card

TODO 📚

- ✋ Move anything 'ready' here — 1
- Write instructions — 15 Jul
- Write readme — 16 Jul
- Edit to follow DRY principles — 16 Jul
- Do bash scripting — 15 Jul
- + Add a card

DOING ⚙️

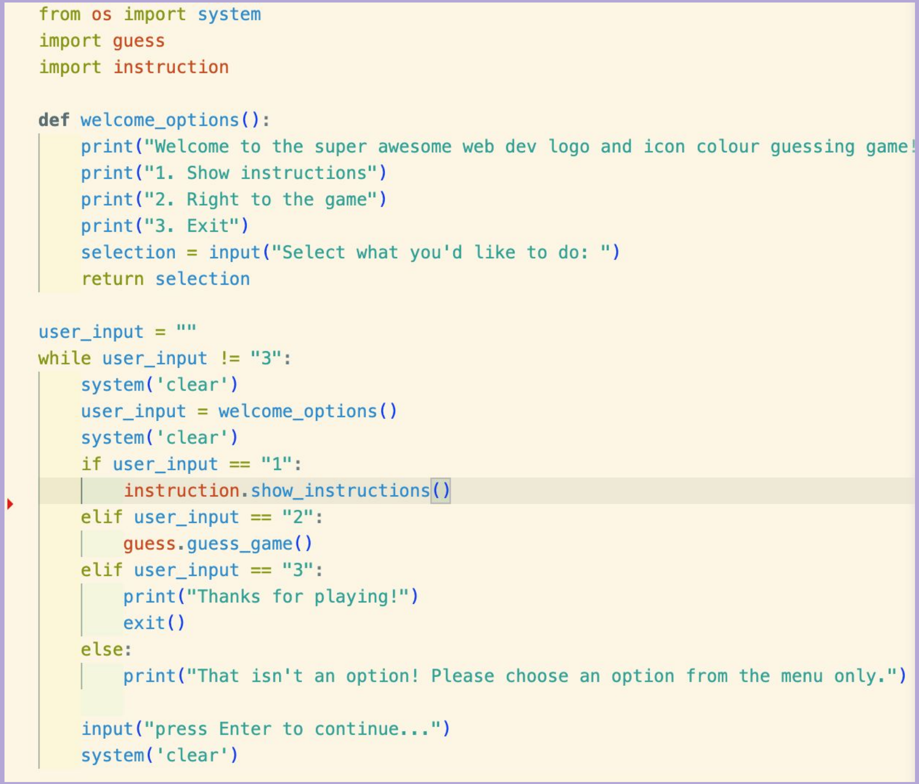
- ✋ Move anything that is actually started here — 1
- Do slidedeck — 14 Jul
- Write presentation — 14 Jul
- Plan tests — 16 Jul
- Document process
- Implement tests — 17 Jul
- + Add a card

DONE! 🙌

- ✋ Move anything from doing to done here — 1
- Come up with hints
- Create scoring system (feature) — 14 Jul
- Create menu (feature) — 14 Jul
- Write draft1 code — 14 Jul
- Create hints system (feature) — 14 Jul
- + Add a card

Menu Feature

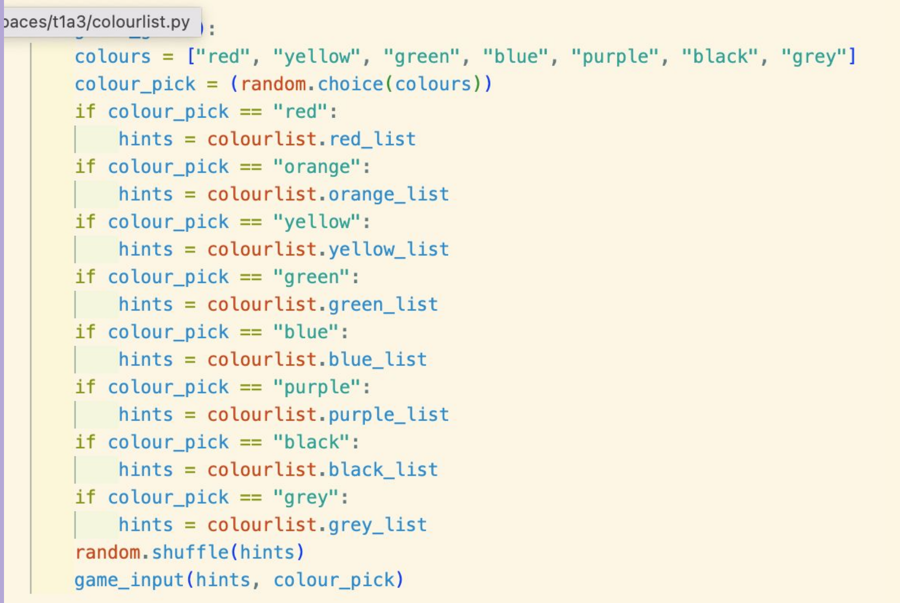
- List menu options
- Link menu options with relevant functions
- Figure out how to quit program
- Create error response
- Test menu function
- Attempted to get it to open an image of the logos, was unsuccessful



```python
from os import system
import guess
import instruction

def welcome_options():
    print("Welcome to the super awesome web dev logo and icon colour guessing game!
    print("1. Show instructions")
    print("2. Right to the game")
    print("3. Exit")
    selection = input("Select what you'd like to do: ")
    return selection

user_input = ""
while user_input != "3":
    system('clear')
    user_input = welcome_options()
    system('clear')
    if user_input == "1":
        instruction.show_instructions()
    elif user_input == "2":
        guess.guess_game()
    elif user_input == "3":
        print("Thanks for playing!")
        exit()
    else:
        print("That isn't an option! Please choose an option from the menu only.")

    input("press Enter to continue...")
    system('clear')
```

Hints Feature

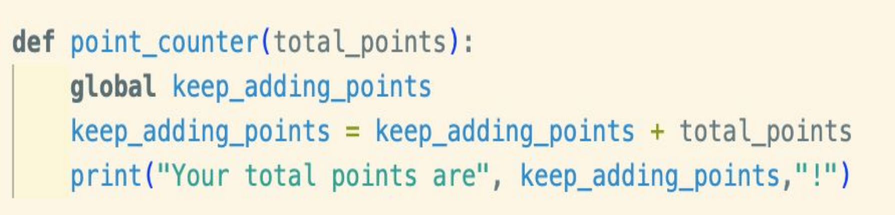
- List hints in an accessible manner
- Create function for randomly choosing colour
- Create function for randomly choosing hints
- Get functions working together
- Test performance of hints system
- Learning about the random module in Python
- Goes along with hints list shown previously



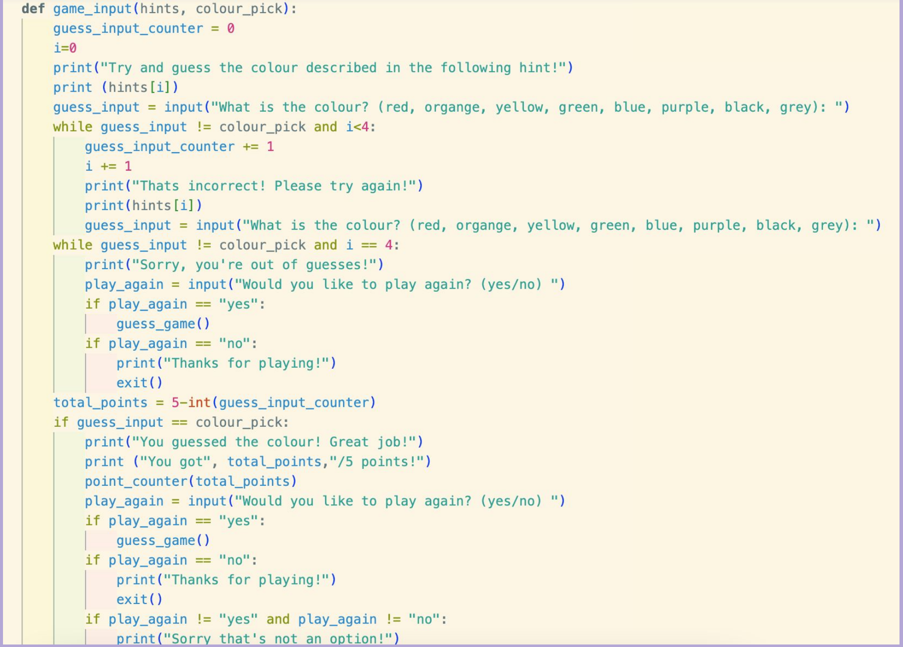
```
paces/t1a3/colourlist.py ):
    colours = ["red", "yellow", "green", "blue", "purple", "black", "grey"]
    colour_pick = (random.choice(colours))
    if colour_pick == "red":
        hints = colourlist.red_list
    if colour_pick == "orange":
        hints = colourlist.orange_list
    if colour_pick == "yellow":
        hints = colourlist.yellow_list
    if colour_pick == "green":
        hints = colourlist.green_list
    if colour_pick == "blue":
        hints = colourlist.blue_list
    if colour_pick == "purple":
        hints = colourlist.purple_list
    if colour_pick == "black":
        hints = colourlist.black_list
    if colour_pick == "grey":
        hints = colourlist.grey_list
    random.shuffle(hints)
    game_input(hints, colour_pick)
```

Score Keeping Feature

- Create relevant scoring system
- Create function for keeping score across games
- Connect score functions with main game functions
- Create error handling
- Test score keeping function
- Found in main game_input and point_counter functions



```python
def point_counter(total_points):
    global keep_adding_points
    keep_adding_points = keep_adding_points + total_points
    print("Your total points are", keep_adding_points,"!")
```



```python
def game_input(hints, colour_pick):
    guess_input_counter = 0
    i=0
    print("Try and guess the colour described in the following hint!")
    print (hints[i])
    guess_input = input("What is the colour? (red, organge, yellow, green, blue, purple, black, grey): ")
    while guess_input != colour_pick and i<4:
        guess_input_counter += 1
        i += 1
        print("Thats incorrect! Please try again!")
        print(hints[i])
        guess_input = input("What is the colour? (red, organge, yellow, green, blue, purple, black, grey): ")
    while guess_input != colour_pick and i == 4:
        print("Sorry, you're out of guesses!")
        play_again = input("Would you like to play again? (yes/no) ")
        if play_again == "yes":
            guess_game()
        if play_again == "no":
            print("Thanks for playing!")
            exit()
    total_points = 5-int(guess_input_counter)
    if guess_input == colour_pick:
        print("You guessed the colour! Great job!")
        print ("You got", total_points,"/5 points!")
        point_counter(total_points)
        play_again = input("Would you like to play again? (yes/no) ")
        if play_again == "yes":
            guess_game()
        if play_again == "no":
            print("Thanks for playing!")
            exit()
        if play_again != "yes" and play_again != "no":
            print("Sorry that's not an option!")
```

Overview of Code

- See VS Code