

Software Degree **FULL STACK AI DEVELOPER**
PAGE 01

Portfolio

GINA GHOURI



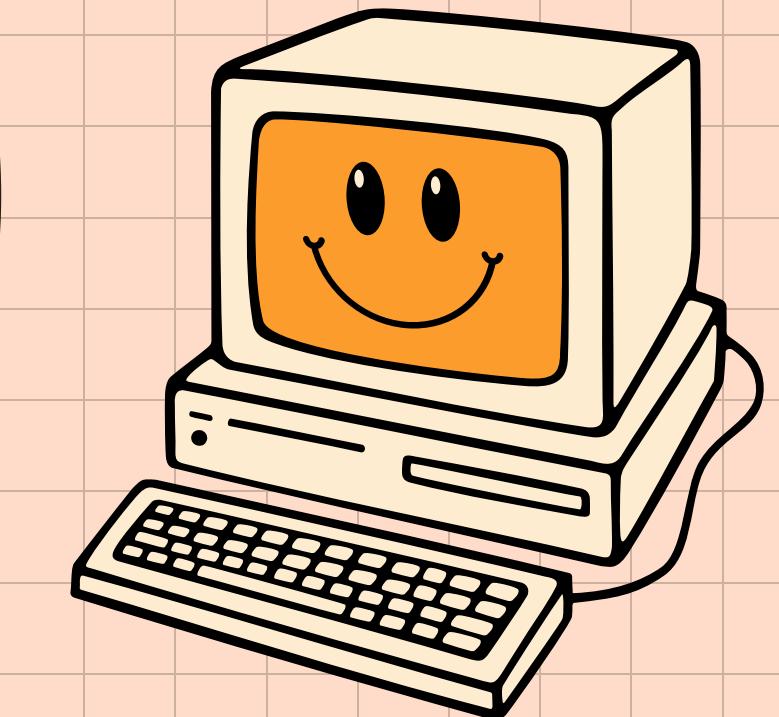
Morgan Stanley

Introduction

"I KNOW THAT TWO & TWO
MAKE FOUR—AND SHOULD BE
GLAD TO PROVE IT TOO IF I
COULD—THOUGH I MUST SAY IF
BY ANY SORT OF PROCESS I
COULD CONVERT 2 & 2 INTO
FIVE IT WOULD GIVE ME MUCH
GREATER PLEASURE." —LORD
BYRON 1813 LETTER TO HIS
FUTURE WIFE ANNABELLA.



About Me



WELCOME TO MY VISIONARY PORTFOLIO! :: MY MAIN INTERESTS LIE IN FULL STACK INNOVATION, CREATIVE CODING AND SUSTAINABLE SOLUTIONS TO PROBLEM-SOLVING AND WEB DEVELOPMENT 🌈

CS Education

APRIL
2024-

CFG Intro to: Coding
Python
Java
C #
WebApp Security
DevOps
Machine Learning

AUGUST
2023

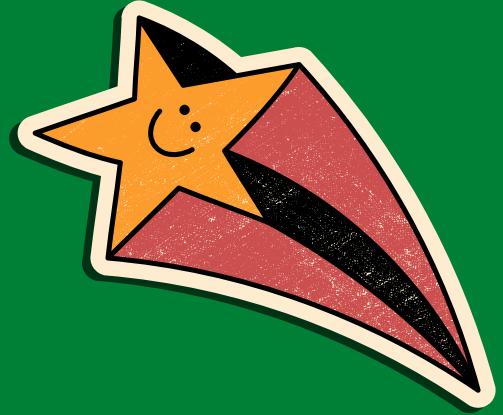
MOOC Courses
WebDevelopment
Interactive
Websites
Agile&Scrum
Git&Github

JAN 2024

Morgan Stanley

Software Degree
Javascript
HTML/SQL
Python&Apps

Software Skills



Front-End:
*Javascript, HTML, CSS
*Animation Design
*GIU
*Codepen.io
*OBS Studio
*Carbon Source Code Images

Back-End: Python3
PyMongo*Pandas*Flask*SQL
Jinja*Textblob*Plotly*MongoDB
Software Tools:Visual Studio Code*Visual Studio*Pycharm*Agile Scrum*Jira*Figma Unittesting*UAT Atlassian*Kanban*Debugging GIF API*Restful API
Webhooks*Zapier Dev Platform Git,Github Desktop*Canva Python Turtle*Tkinter Codewars*Hackerrank Google Colaboratory*InelliJ

IT Career Interests

- *Corporate Application Development
- *FullStack&Web Development
- *Project Management
- *Product Design
- *Education for Inclusion
- *Programming Documentation
- Finance and Wealth Management
- Health&Sustainability

Work Experience:



Content&Tutorial
Writing

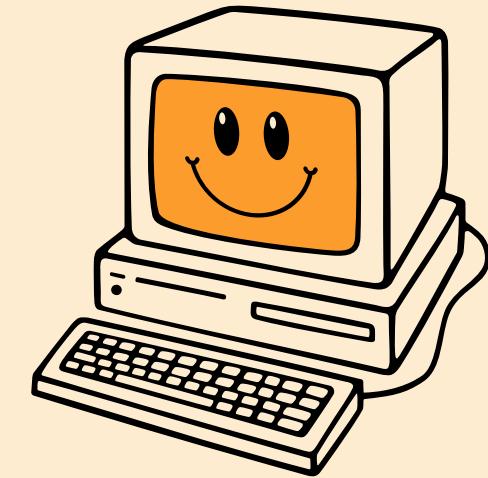
Visual&Audio
Branding

Web&Logo
Design

Dev Skills

- **Studio Binder, Moho**
- **codepen.io JS, CSS, HTML**
- **flexbox, keyframes, left pill, pill text, fill mode**

UI Animation:



Film Drawings

Roll the Dice

Pill Shape



Recipe APIs

A food recipe search program by ingredients, kcalories and weight, entered by user, interacting with Edamam and Tasty APIs, saved in Jupyter Notebook to document coding workflow

<https://github.com/ginaru/bik/Recipe-APIs>

```
D:\CFGDegree\Foundation1\Python\Intro to Python>python "Recipe APIs.py"
What ingredient should be in recipes? chicken
>> Recipe data stored in recipes.txt.
>> Recipe data stored in sorted_recipes.txt.
Approximately how much kcal must be in dish (type max amount): 100
Sorry, no dish found according to your parameters, please change your search parameters.
Data written to 'nutritionApiData.json' file.

Search results from Tasty API:
Low-Carb Avocado Chicken Salad
Total Calories: 250

Creamy Chicken Penne Pasta
Total Calories: 703

Asparagus-Stuffed Chicken Breast
Total Calories: 209

One-Pot Chicken Fajita Pasta
Total Calories: 862

Chicken & Veggie Stir-Fry
Total Calories: 272

Paprika Chicken & Rice Bake
Total Calories: 313

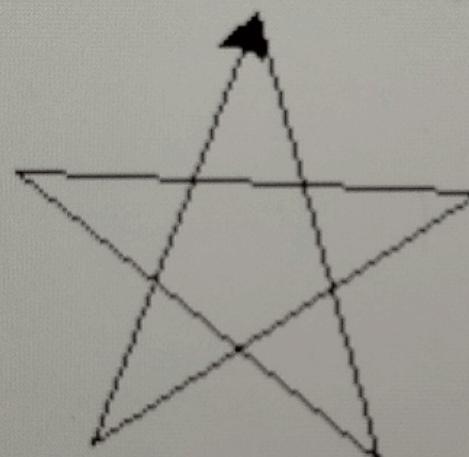
Hasselback Chicken
Total Calories: 332

Easy Butter Chicken
Total Calories: 799
```

Group Project 1

Project 2

Draw Shapes



File Edit Selection View Go Run ... ← →

Restricted Mode is intended for safe code browsing. Trust this window to enable all features. [Manage](#)

draw star.py X

```
C: > Users > HP > Documents > CFG > draw star.py > ...
1 # Python program to draw star
2 # using Turtle Programming
3 import turtle
4 star = turtle.Turtle()
5
6 star.right(75)
7 star.forward(100)
8
9 for i in range(4):
10     star.right(144)
11     star.forward(100)
12
13 turtle.done()
```

- Python Turtle
Graphics -

View Docks Profile Scene Collection Tools Help



selected

Properties



Type here to search

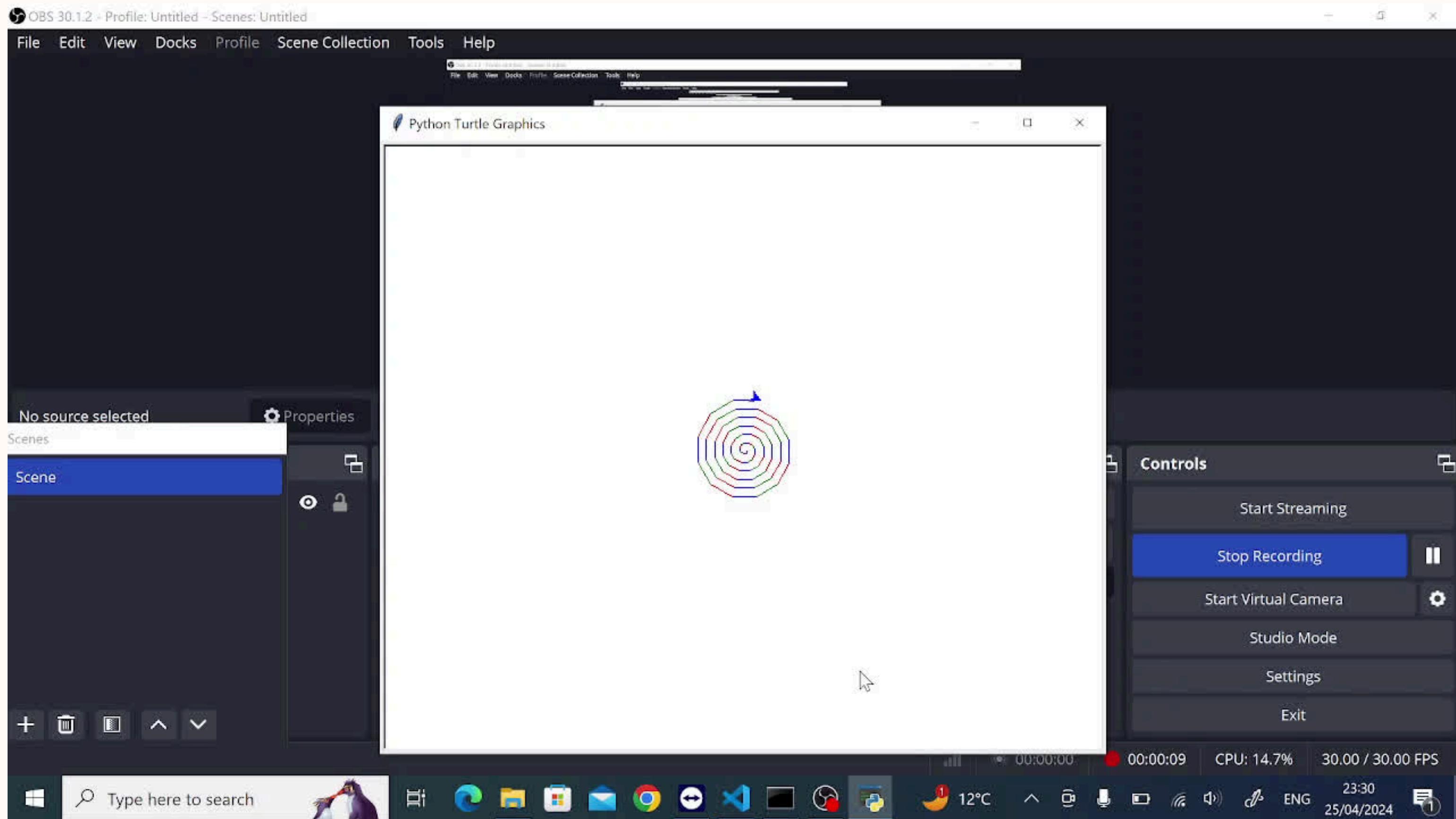


12°C



23:30

25/04/2023

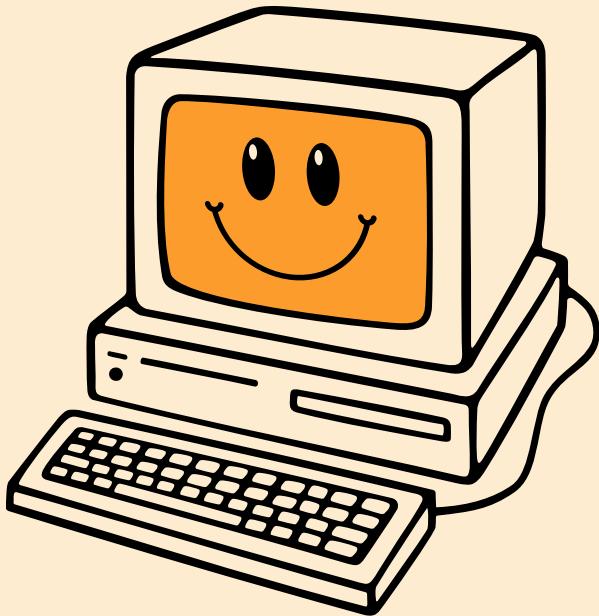


The screenshot shows a Python code editor interface with the following details:

- File Menu:** File, Edit, Selection, View, Go, Run, ...
- Search Bar:** Search
- Toolbar:** Includes icons for file operations like Open, Save, Find, and Run.
- Tab Bar:** Shows three tabs: "draw_star.py", "create_shape.py", and "star.py".
- Path Bar:** C: > Users > HP > Documents > CFG > MOOC Intro to Python > star.py > ...
- Code Area:** Displays the content of the "star.py" file, which uses the turtle module to draw shapes. The code includes:
 - Line 4: `size = 99`
 - Line 6: `arrow.color('red')`
 - Line 7: `### For creating a circle`
 - Line 8: `for i in range(36):`
 - Line 9: ` arrow.right(10)`
 - Line 10: ` arrow.forward(9)`
 - Line 11: (empty)
 - Line 12: `arrow.color('purple')`
 - Line 13: `arrow.right(77)`
 - Line 14: `# For creating a triangle`
 - Line 15: `arrow.forward(size)`
 - Line 16: `arrow.right(144)`
 - Line 17: `arrow.forward(size)`
 - Line 18: `arrow.right(144)`
 - Line 19: `arrow.forward(size)`
 - Line 20: `arrow.right(144)`
 - Line 21: `arrow.forward(size)`
 - Line 22: `arrow.right(144)`
 - Line 23: `arrow.forward(size)`
 - Line 24: (empty)
 - Line 25: `arrow.color('blue')`
 - Line 26: `arrow.right(67)`
 - Line 27: `arrow.forward(48)`
 - Line 28: `arrow.right(90)`
 - Line 29: `arrow.forward(104)`
 - Line 30: `arrow.right(90)`
 - Line 31: `arrow.forward(104)`
 - Line 32: `arrow.right(90)`
 - Line 33: `arrow.forward(104)`
- Status Bar:** In 4 Col 10 Spaces: 4 UFT-8 { Python 3.12.3 64-bit }



Calculator Spell checker Simple Games

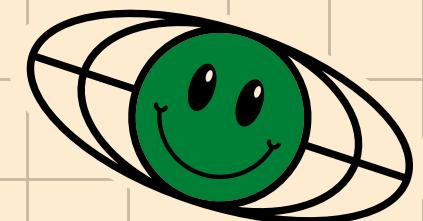


Python Tkinter, TextBlob and PIL

<https://github.com/ginarubik/Spellchecker>

<https://github.com/ginarubik/Calculator>

Project 3



```
← → ⌂ Search

A teljes képernyős módból való kilépéshez nyomja meg a(z) Esc billentyűt
C:\Users\iqrab\OneDrive\Documents\CFG\Python MOOC> main.py

t="Spelling Checker", font=("Comic Sans MS", 20, "bold"), bg="#91D8E4", fg="#468C68")
)

justify="center", width=30, font=("Comic Sans MS", 20, "bold"), bg="white", border=2)

()

()

- "Correct text is .", font=("Comic Sans MS", 20), bg="#91D8E4", fg="#468C68")
)
ht)

t="Check", font=("Comic Sans MS", 20, "bold"), fg="white", bg="#75BED9", command=check_spelling
("Comic Sans MS", 20)bg="#91D8E4", fg="#468C68")

PORTS DEBUG CONSOLE

C:\Users\iqrab\OneDrive\Documents\CFG\Python MOOC> c;; cd 'c:\Users\iqrab\OneDrive\Documents\CFG\Python MOOC'; & 'C:\Program Files\Code\Code.exe' --extension=python
C:\Users\iqrab\OneDrive\Documents\CFG\Python MOOC> c;; cd 'c:\Users\iqrab\OneDrive\Documents\CFG\Python MOOC'; & 'C:\Program Files\Code\Code.exe' --extension=python
C:\Users\iqrab\OneDrive\Documents\CFG\Python MOOC> c;; cd 'c:\Users\iqrab\OneDrive\Documents\CFG\Python MOOC'; & 'C:\Program Files\Code\Code.exe' --extension=python
```



Magic Spell!

Enter a word:

A text input field containing the letter 'p'.A text input field next to the first one, currently empty.

Check my spelling!

You didn't enter a word!

Project 4

IT WebApp for
Code First Girls

a user-interactive
educational web application
using HTML,CSS and
JavaScript: dice animation,
choice of 4 specialisations
and pop-up console

<https://codepen.io/Guru-GanaSaki/pen/mdamKbQ?editors=0110>

CFG Degree

Code First Girls 📚 Code First Girls 📚 Code First Girls 🎓 Code First Girls 🎓



Click

Specialisations:

1. Software Engineering 🧑
2. Full-Stack Developer 🧑
3. Data Career Pathway 🧑
4. Product Management 🧑

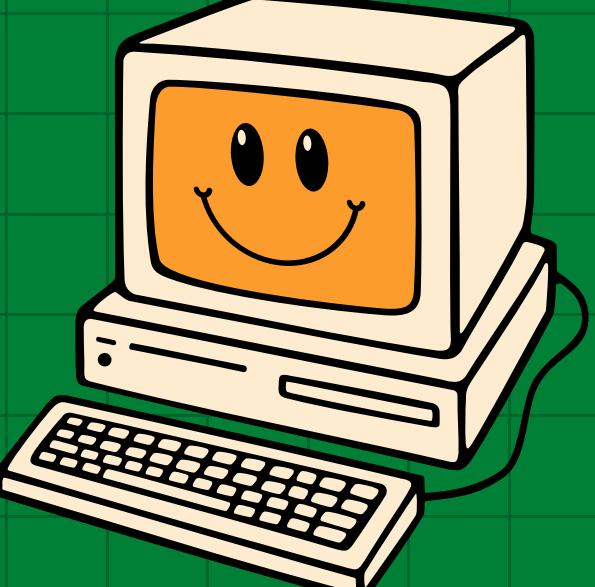
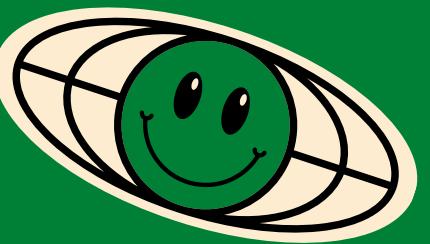
Select Your CFG Degree Track

Choose a Specialisation:

Enter Your Name



ISS International SpaceShip API



**Python console application
calculating distance from user
location, using Geopy Nominatim API
by mathematical Haversine formula
storing results in a JSON file**

https://github.com/ginarubik/ISS_SpaceShip_API

Project 5

```
Welcome to the International Space Station App!
Please enter your email: ginarubik@gmail.com
Enter a location (country or city): Hungary
The ISS is approximately 15328.60 kilometers away from Hungary
The ISS is currently flying over Russia

Do you want to check another location? ('n' to exit): Budapest
Enter a location (country or city): Budapest
The ISS is approximately 13858.49 kilometers away from Budapest
The ISS is currently flying over Russia

Do you want to check another location? ('n' to exit): yes
Enter a location (country or city): UK
The ISS is approximately 8440.45 kilometers away from UK
The ISS is currently flying over Russia

Do you want to check another location? ('n' to exit): yes
Enter a location (country or city): Hereford
The ISS is approximately 2353.74 kilometers away from Hereford
The ISS is currently flying over Russia

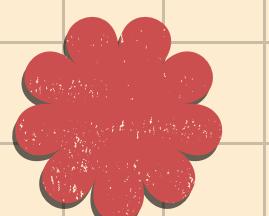
Do you want to check another location? ('n' to exit): n
Thank you for using the ISS App!
```

Project 6

Book API

- To simulate user interaction run the **main.py** for list of available books stored in MySQL database
- API handles the interactions between the client-side and the database, so books can be viewed, added, updated and deleted
- App can be expanded/customised by adding features like user authentication and additional endpoints

https://github.com/ginarubik/Book_API



A screenshot of a web browser window showing the URL `127.0.0.1:8080`. The page displays a JSON array of three book entries, each with an ID, author, name, pages, and publication date.

```
1 [  
2 {  
3   "author": "Robert Greene",  
4   "id": 1,  
5   "name": "48 Laws of Power",  
6   "pages": 300,  
7   "publication_date": "2002"  
8 },  
9 {  
10  "author": "Yuval Noah Harari",  
11  "id": 2,  
12  "name": "Homo Deus",  
13  "pages": 300,  
14  "publication_date": "2002"  
15 },  
16 {  
17  "author": "Yuval Noah Harari",  
18  "id": 3,  
19  "name": "Sapiens",  
20  "pages": 300,  
21  "publication_date": "2002"  
22 }]  
23 ]
```

Group Project 7

Cinema Ticketing API

MySQL database stores information about movie titles, age restrictions, showtimes, prices, seat numbers and user names. The three API endpoints are for retrieving movie showings by age restrictions, adding new bookings, and updating existing bookings. The cinema_config module contains configuration information for connecting to the MySQL database

https://github.com/ginarubik/CineTix_API

```
← C ⓘ 127.0.0.1:8080  
[  
1  {  
2      "Age_restrictions": 16,  
3      "Movie_id": 1,  
4      "Movie_title": "57 Seconds",  
5      "Price": "5.50",  
6      "Seat_number": "17C",  
7      "Time": "20:30:00",  
8      "User_name": "John Doe"  
9  },  
10  {  
11      "Age_restrictions": 16,  
12      "Movie_id": 2,  
13      "Movie_title": "A Haunting in Venice",  
14      "Price": "5.99",  
15      "Seat_number": "11A",  
16      "Time": "20:00:00",  
17      "User_name": "Jane Smith"  
18  },  
19  {  
20      "Age_restrictions": 16,  
21      "Movie_id": 3,  
22      "Movie_title": "DogMan",  
23      "Price": "3.50",  
24      "Seat_number": "9B",  
25      "Time": "20:15:00",  
26      "User_name": "Mike Johnson"  
27  },  
28  {  
29      "Age_restrictions": 18,  
30      "Movie_id": 4,  
31      "Movie_title": "The Exorcist: Believer",  
32      "Price": "6.99",  
33      "Seat_number": "13F",  
34      "Time": "19:50:00",  
35      "User_name": "Emily Williams"  
36  },  
37  {  
38      "Age_restrictions": 16,  
39      "Movie_id": 5,  
40      "Movie_title": "The Nun II",  
41      "Price": "4.50",  
42      "Seat_number": "14D",  
43      "Time": "22:15:00",  
44      "User_name": "David Brown"  
45  },  
46  {  
47      "Age_restrictions": 18,  
48      "Movie_id": 6,  
49      "Movie_title": "The Equalizer 3"  
50  }
```

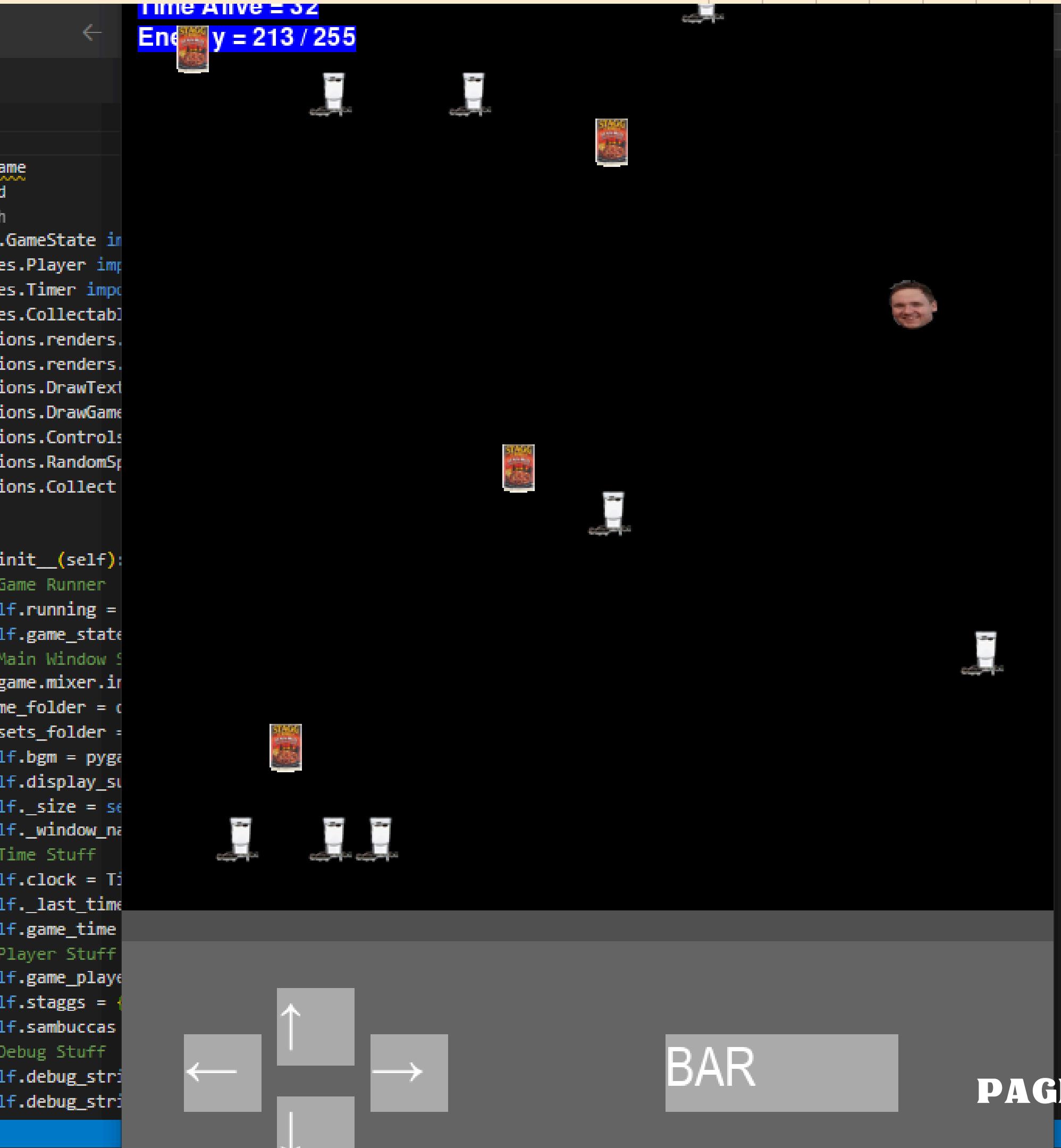
Project 8

Python Game

Py game with a simple menu:

- **when the player starts, the game_state switches to 'PLAY'. user controls a character to move around.**
- **the player can have an energy bar that decreases over time. collecting 'Stagg' items might increase energy, while 'Sambucca' items might decrease it**
- **consider writing unit tests (especially to refactor code into smaller functions) to ensure changes don't break existing functionality**

https://github.com/ginarubik/Game_Development

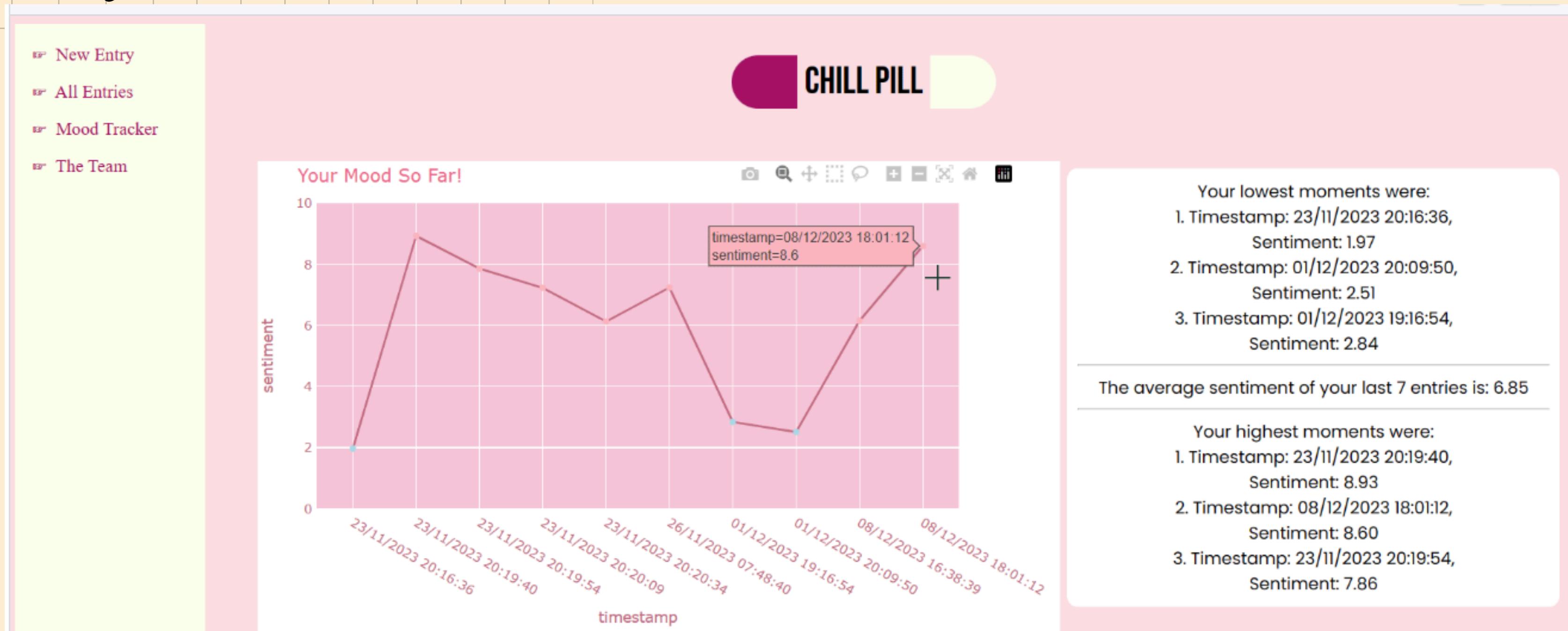


Group Project 9

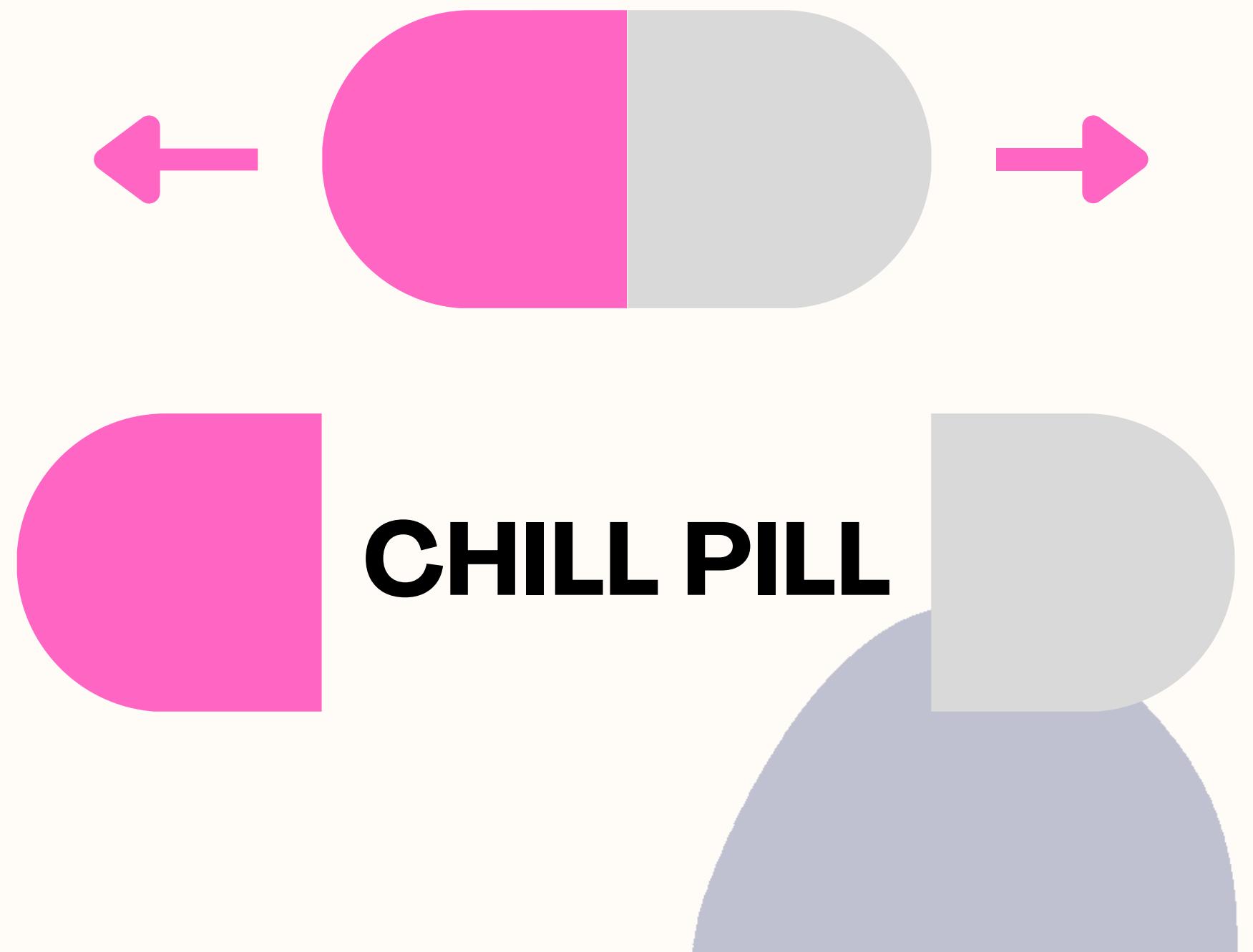
ChillPill Wellness Website

user journal entries of daily moods evaluated by AI-based API sentiment analysis and GIF affirmations displayed on mood-tracker graphs with pill animation creativity and team members' page.

https://github.com/ginarubik/Wellness_Website



UI: Animation



```
@keyframes left-pill-animation {  
  0% {  
    margin-right: 0px;  
  }  
  100% {  
    margin-right: 125px;  
  }  
}
```

```
#pill-left {  
  background-color: #a61266;  
  border-top-left-radius: 50px;  
  border-bottom-left-radius: 50px;  
  animation: left-pill-animation;  
  animation-duration: 1s;  
  animation-fill-mode: forwards;  
}  
  
#pill-right {  
  background-color: #ffffec;  
  border-top-right-radius: 50px;  
  border-bottom-right-radius: 50px;  
}
```

B 2 Aea 698692 A 515 A 56 C 1 X • Chill Pill +

127.0.0.1:5000/submission?result=New+journal+entry+added!&id=657c72f12e6e4da91ff106ca&da 80% ⭐

New Entry

All Entries

Mood Tracker

The Team

CHILL PILL

JOURNAL ENTRY

15/12/2023, 15:38:25

I am feeling great today, I feel happy. I had a nice day and a nice cup of coffee. CFG classes were very interesting today and my project team were very helpful. We met our goals today.

SUBMIT

[Source Code](#)

127.0.0.1

Computer Tutorials

Python Foundation & Specialisation Topics

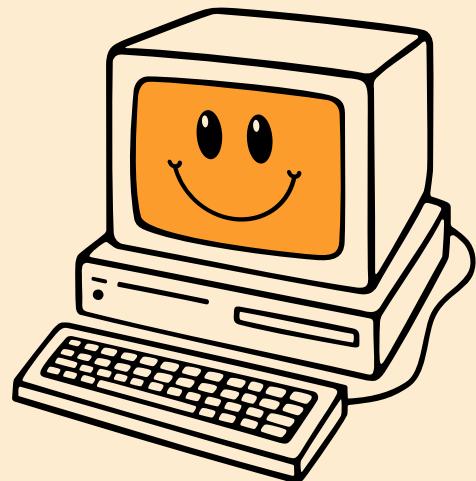
Problem Solving Logic

Developer Ethics

Program Documentation

https://github.com/ginarubik/Computer_Tutorials

Project 10



```
    protected method (not recommended)
    alert() # Output: Maintenance Alert: Schedule a service
```

Inheritance: allows a class (subclass/derived class) to inherit attributes and methods from another class (base class). Increases code reusability and establishes an "is-a" relationship between objects.

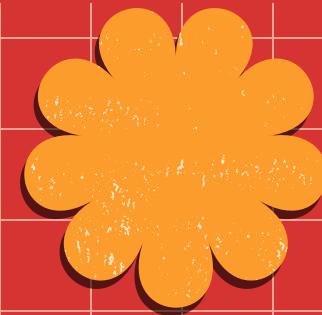
```
class ElectricCar(Car):
    def __init__(self, brand, model, battery_capacity):
        super().__init__(brand, model)
        self.battery_capacity = battery_capacity
```

```
car = ElectricCar("Tesla", "Model S", "100 kWh")
car.display_info() # Output: Tesla Model S
```

Polymorphism: allows objects of different types to be treated as common types.

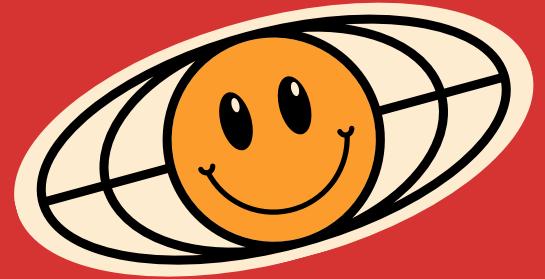
```
if):
```

Programmer Inspirations

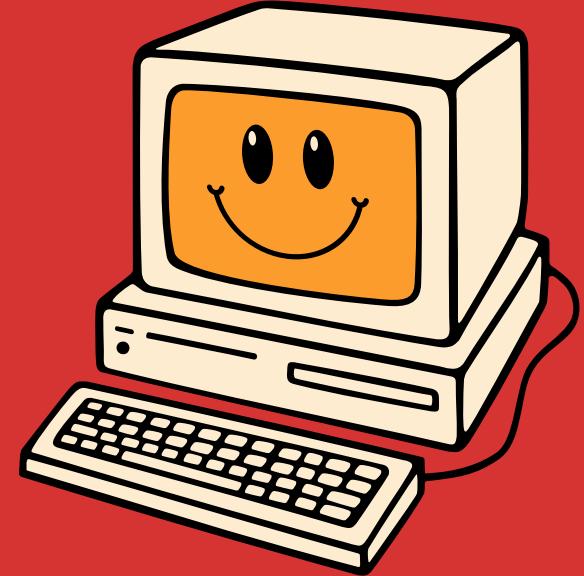


Computer Science Distilled (Ferreira Filho)
Grokking Algorithmns (Aditya Bhargava),
Introduction to APIs (Brian Cooksey)
The Daily Laws (Robert Greene)
Stephen Cleary blog, Terry Davis vlogs
The Man Who Knew Infinity (mathematician)
Ramanujan biography- feature film
Half Life (documentary on game developers)





Dev Links



<https://github.com/ginaghouri>

[https://www.linkedin.com/in/gina-
ghouri](https://www.linkedin.com/in/gina-ghouri)

