Softwware Degree

FULL STACK DEVELOPER

Portfolio

CODE FIRST GIRLS

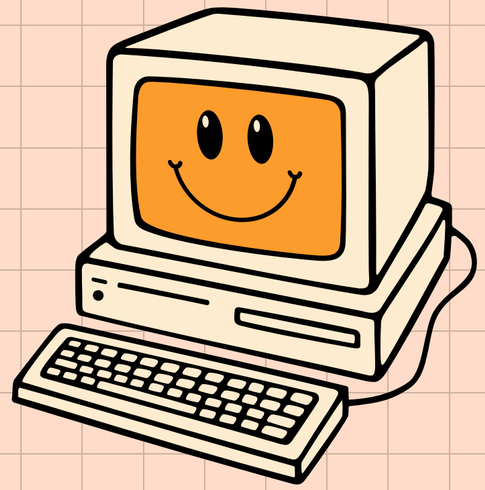
Gina Rubik

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. Their daughter Ada Lovelace was the first programmer

About Me



Welcome to my Visionary Portfolio! 👀 My main interests are: full stack innovation, creative coding and sustainable solutions to problem-solving. 🌱 Trained by CFG in software engineering and web development. 🌈

https://github.com/ginarubik

ginarubik - Overview

Code First Girls Software Development Full Stack Creativity and Innovation - ginarubik

GitHub

CS Education

APRIL 2024-

Intro to Coding
Intro to Python
Intro to Java
Intro to C #
Intro to Golang
Intro to Machine Learning
Code First Girls

AUGUST 2023

Web Development
Interactive Websites
AgileScrum/GitGithub
MOOC courses

JAN 2024

Software Degree:
JS/HTML/SQL/Python&
Apps
Morgan Stanley

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

*AI Innovation&Research
*Corporate Application Development
*Machine and Deep Learning
*Java&C languages
*Project Management
*Product Design
*Creative Visuals&Full Stack
*Education for Special Needs
*Programming Documentation
Finance and Wealth Management
Health&Sustainability

Work Experience:

Content&Tutorial Writing

Visual&Audio Branding

Web&Logo Design

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

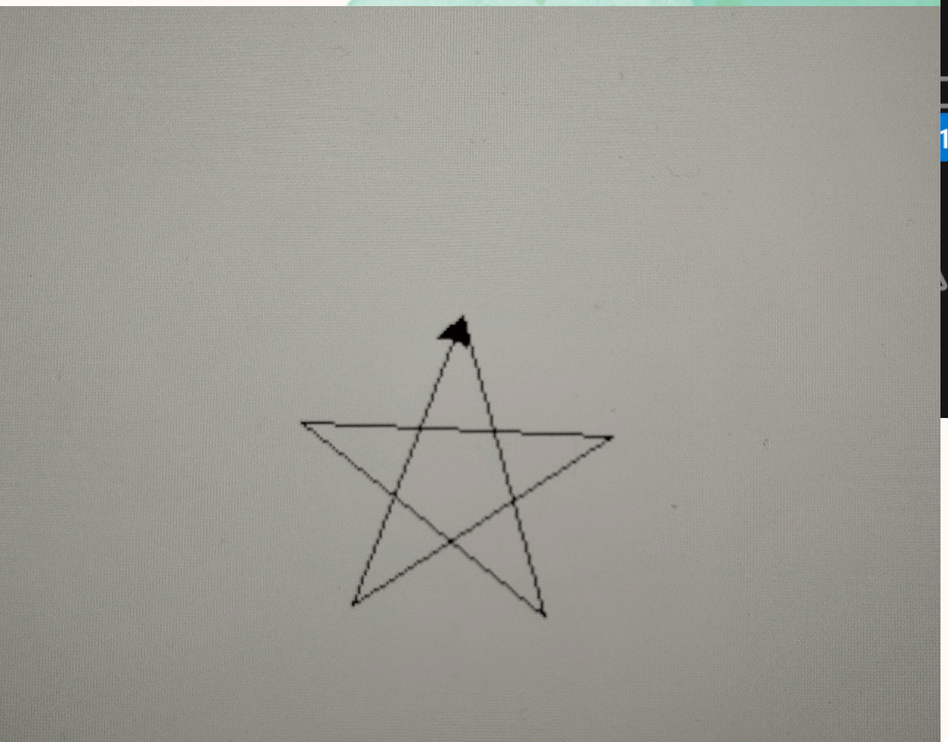
https://github.com/ginarubik/Recipe_APIs

Group Project 1

```
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
```

Project 2:

Draw Shapes



File Edit Selection View Go Run ···

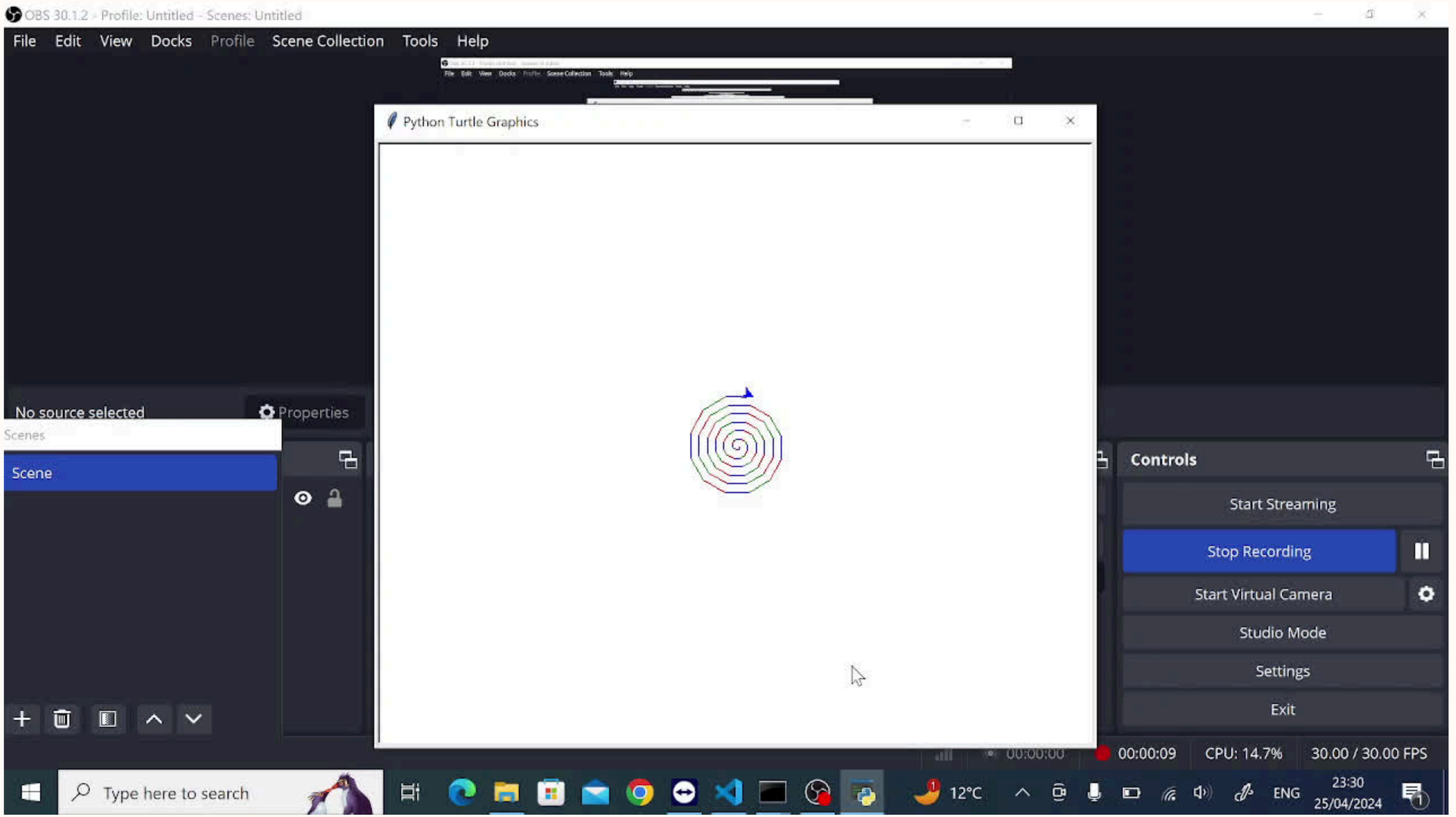
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manag

draw star.py

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 -


OBS 30.1.2 - Profile: Untitled - Scenes: Untitled
File Edit View Docks Profile Scene Collection Tools Help
Python Turtle Graphics
No source selected
Properties
Scenes
Scene
Controls
Start Streaming
Stop Recording
Start Virtual Camera
Studio Mode
Settings
Exit
00:00:09
CPU: 14.7%
30.00 / 30.00 FPS
Type here to search
12°C
ENG
23:30
25/04/2024

File Edit Selection View Go Run ··· Search

draw star.py | create_shape.py | star.py

C: > Users > HP > Documents > CFG > MOOC Intro to Python > star.py > ...

```
size = 99

arrow.color('red')
### For creating a circle
for i in range(36):
    arrow.right(10)
    arrow.forward(9)

arrow.color('purple')
arrow.right(77)
# For creating a triangle
arrow.forward(size)
arrow.right(144)
arrow.forward(size)
arrow.right(144)
arrow.forward(size)
arrow.right(144)
arrow.forward(size)
arrow.right(144)
arrow.forward(size)

arrow.color('blue')
arrow.right(67)
arrow.forward(48)
arrow.right(90)
arrow.forward(104)
arrow.right(90)
arrow.forward(104)
arrow.right(90)
arrow.forward(104)
```

⊗ 0 ⚠ 0 0 Ln 4, Col 10 Spaces: 4 UTF-8 CRLF Python 3.12.3 64-bit

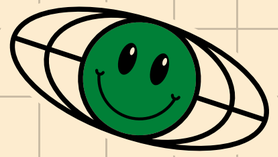
Type here to search 24°C 19:47 14/04/2024

Calculator/Spell Checker and Simple Games

Python Tkinter, TextBlob and PIL

https://github.com/ginarubik/SpellChecker
https://github.com/ginarubik/Calculator

Project 03

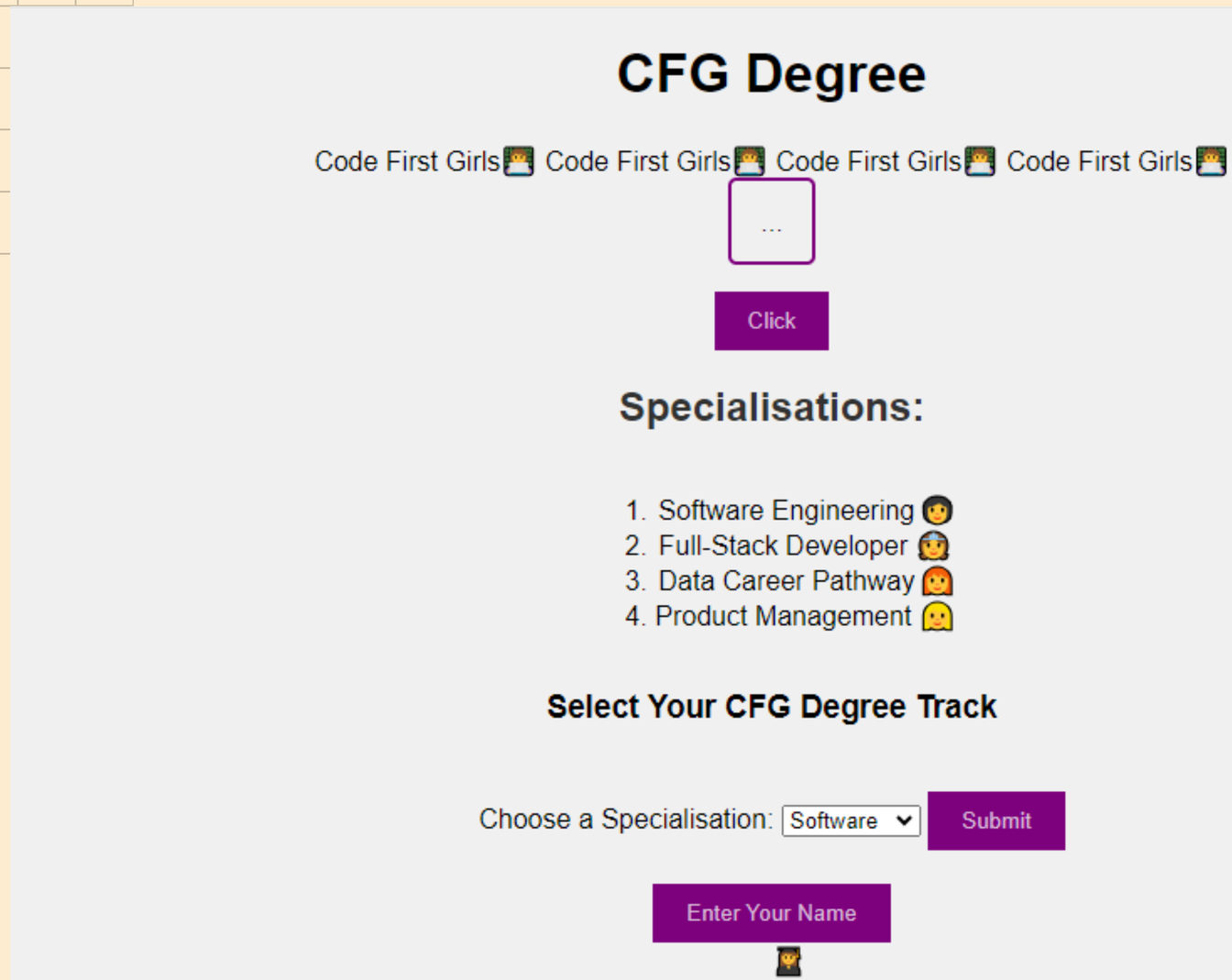


Project 3

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



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 4

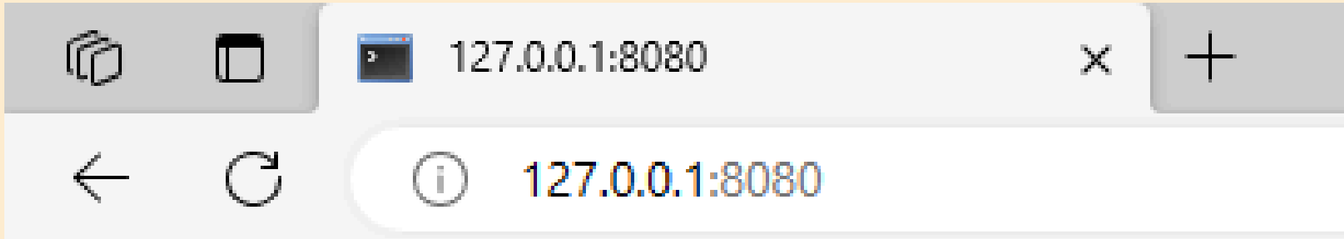
```
Do you want to check another location? ('n' to exit): Budapest
Enter a location (country or city): Budapest
The ISS is approximately 13858.49 kilometers away from Budapest
The ISS is currently flying over Russia

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 5

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
- The application can be expanded/customised for specific use cases by adding features like user authentication and additional endpoints

https://github.com/ginarubik/Book_API




```
[
    {
        "author": "Robert Greene",
        "id": 1,
        "name": "48 Laws of Power",
        "pages": 300,
        "publication_date": "2002"
    },
    {
        "author": "Yuval Noah Harari",
        "id": 2,
        "name": "Homo Deus",
        "pages": 300,
        "publication_date": "2002"
    },
    {
        "author": "Yuval Noah Harari",
        "id": 3,
        "name": "Sapiens",
        "pages": 300,
        "publication_date": "2002"
    }
]
```

Group Project 6

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

127.0.0.1:8080


```
[
    {
        "Age_restrictions": 16,
        "Movie_id": 1,
        "Movie_title": "57 Seconds",
        "Price": "5.50",
        "Seat_number": "17C",
        "Time": "20:30:00",
        "User_name": "John Doe"
    },
    {
        "Age_restrictions": 16,
        "Movie_id": 2,
        "Movie_title": "A Haunting in Venice",
        "Price": "5.99",
        "Seat_number": "11A",
        "Time": "20:00:00",
        "User_name": "Jane Smith"
    },
    {
        "Age_restrictions": 16,
        "Movie_id": 3,
        "Movie_title": "DogMan",
        "Price": "3.50",
        "Seat_number": "9B",
        "Time": "20:15:00",
        "User_name": "Mike Johnson"
    },
    {
        "Age_restrictions": 18,
        "Movie_id": 4,
        "Movie_title": "The Exorcist: Believer",
        "Price": "6.99",
        "Seat_number": "13F",
        "Time": "19:50:00",
        "User_name": "Emily Williams"
    },
    {
        "Age_restrictions": 16,
        "Movie_id": 5,
        "Movie_title": "The Nun II",
        "Price": "4.50",
        "Seat_number": "14D",
        "Time": "22:15:00",
        "User_name": "David Brown"
    },
    {
        "Age_restrictions": 18,
        "Movie_id": 6,
        "Movie_title": "The Equalizer 3"
```

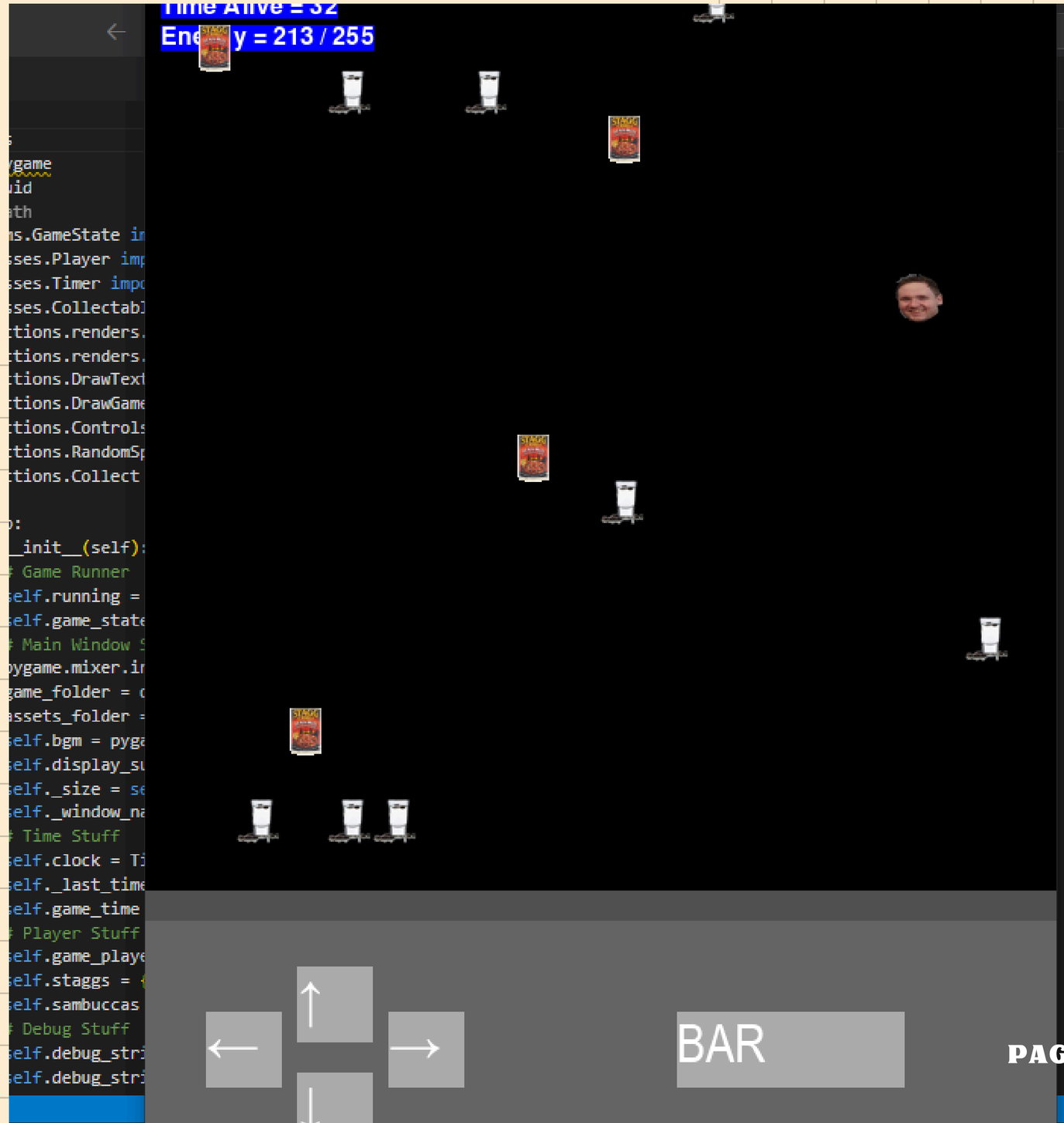
Project 7

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

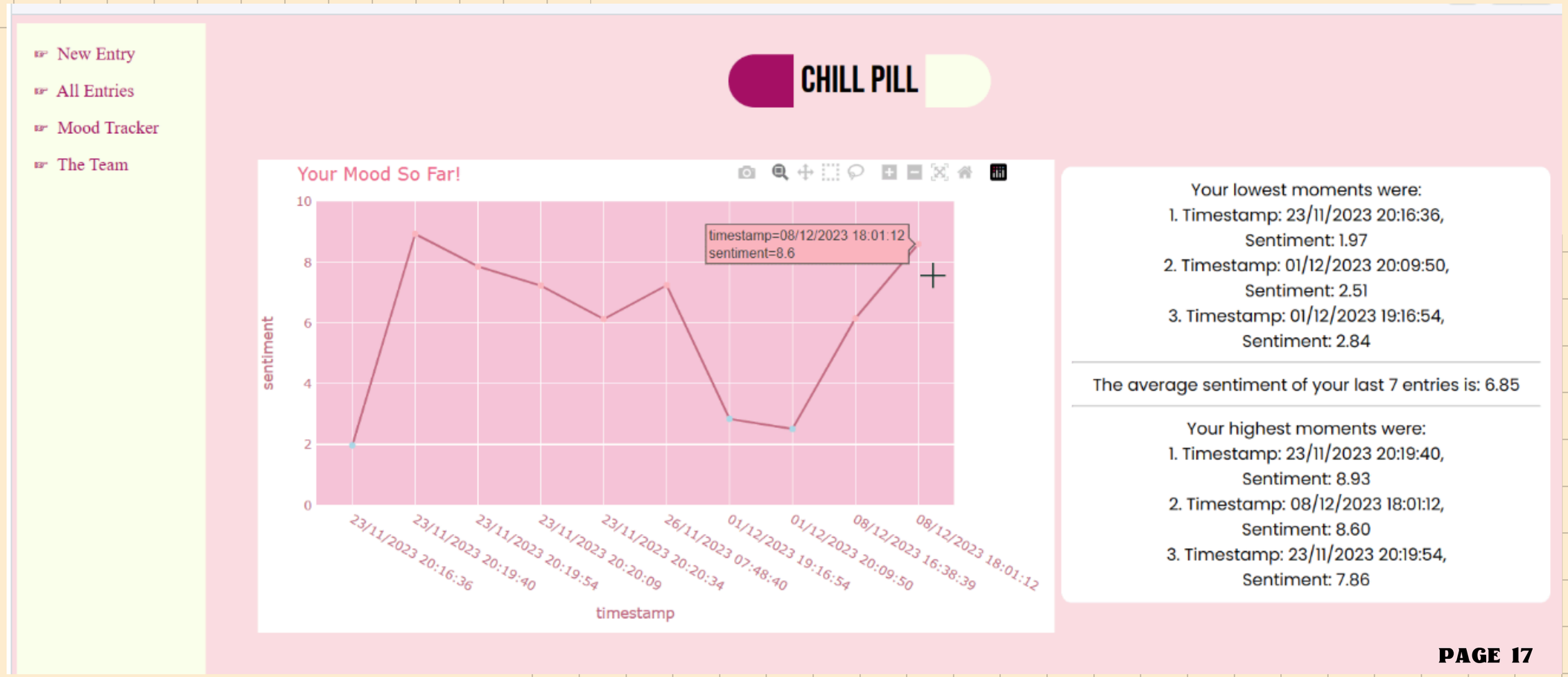


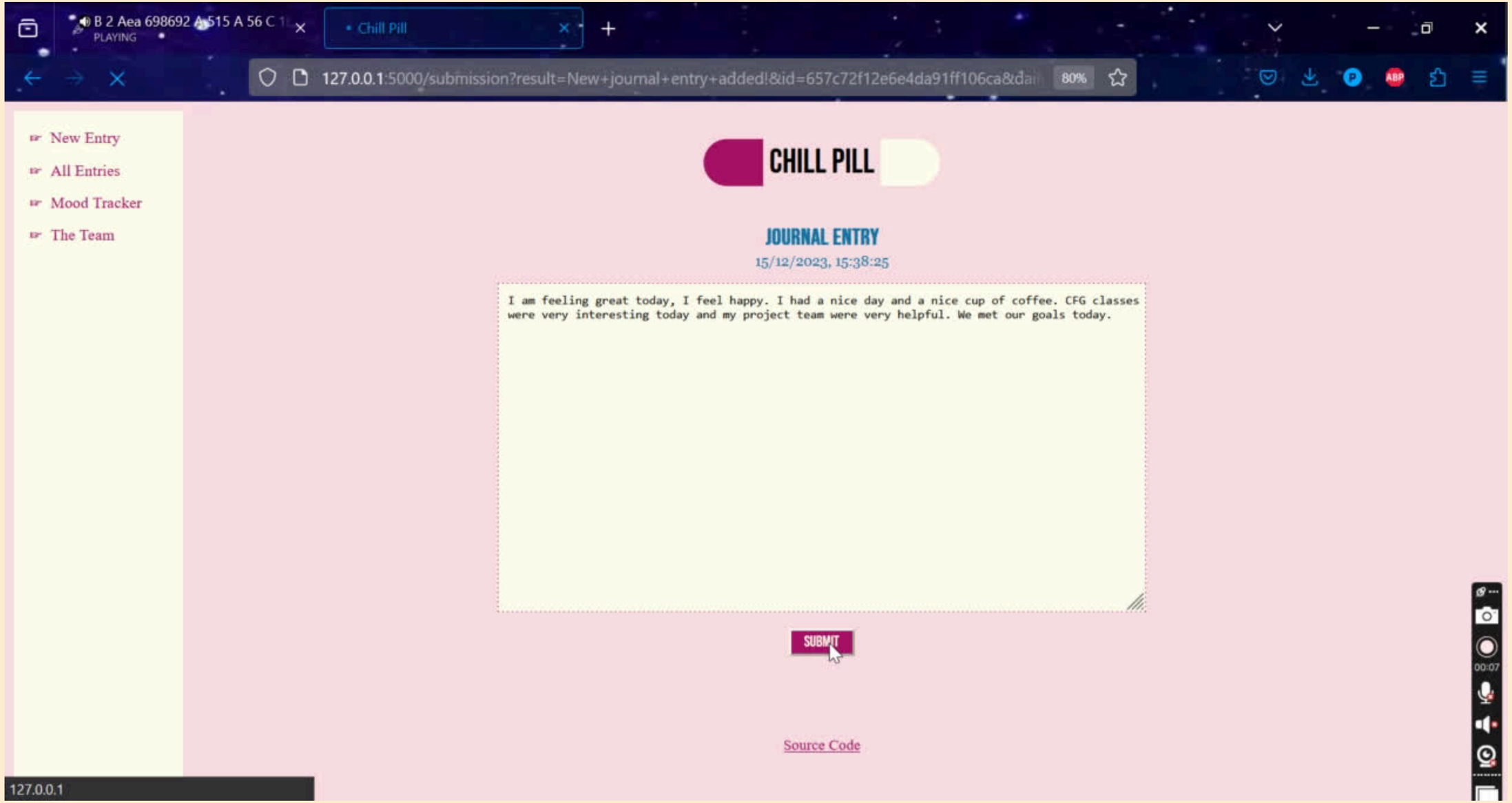
Group Project 8

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




B 2 Aea 698692 A 515 A 56 C 1
PLAYING
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
00:07
127.0.0.1

Computer Tutorials

Python Foundation& Specialisation Topics
Problem Solving Logic
Developer Ethics
Program Documentation

https://github.com/ginarubik/Computer_Tutorials

Project 9

```
otected method (not recommended)
rt()  # Output: Maintenance Alert: Schedule a se

e: allows a class (subclass/derived class) to inherit at
reusability and establishes an "is-a" relationship between

cCar(Car):
t__(self, brand, model, battery_capacity):
r().__init__(brand, model)
.battery_capacity = battery_capacity

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

sm: allows objects of different types to be treated as c

f):
```

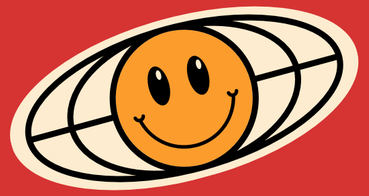
Literature&Films

Computer Science Distilled (Ferreira Filho)
Grokking Algorithmns (Aditya Bhargava),
Introduction to APIs (Brian Cooksey)
The Daily Laws (Robert Greene)

****

The Man Who Knew Infinity(Mathematician Ramanujan Biography- Feature Film)
Half Life(Documentary-Game Developers)

PAGE 20



Thank You!

Questions?

Contact me!

https://www.linkedin.com/in/gina-rubik-25423923