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Orienting phase introduction

Before choosing an profile , I had to be introduced into the world of ICT. With that in mind I had in total of three authentic tasks over the past seven á eight weeks. I will briefly go through them and while that I also will talk about my learning goals and what I learned from the authentic tasks.

One thing to note is that the most important authentic task for me was the third/last task. In this task I had to work in a group and make a system for the pizzeria of Mario and Luigi. They had an outdated ordering system and our task was to update the system to their liking.

First Authentic task

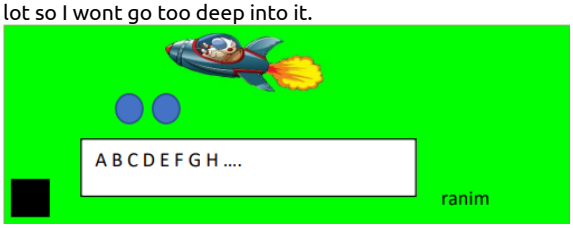
The first authentic task I had was to make a program where it can substitute the game 'Hangman' with the use of Python. The learning goals I had for this period was improving my Python knowledge and having a better study plan. The usage of python was very important in the orienting phase which is why I found it very important to get more knowledgeable.

I first had to make a flowchart and then code it. After that we had to make a low-, mid-, and high wireframes and a prototype for the website version of the game we made, although it didn't need to be functional nor did it needed to be related to the coded game in Python.

The substituted game I made was called 'SpaceShip'. The rules I made was as followed:

- You have in total of 5 chances;
- Each guessed letter will give you a points;
- Each guessed word will give you coins;
- Higher lever will generate more difficult words;
- Once you reached a certain level you can change the language for more difficulty.

This was my mid wireframe... as you can see I still had to learn a lot so I wont go too deep into it.



And this was the code I used. It has letter case sensitivity:

Go up

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```
import random

def chosen_word():
    words=['grey','blue','green','yellow','orange']
    word=random.choice(words)
    print('Your word has', len(word),'letters.')
    return word
word = chosen_word()

from random import choice
str(word)
res = ''.join(choice((str.upper, str.lower))(char) for char in word)

Theword = []
for i in range (len(word)):
    Theword.append('_')
print(*([i for i in Theword]))

chances = 5

while chances > 0:
    while True:
        guess= input('guess a letter')
        failed = 0
        c = 0
        for char in word:
            if char == guess:
                Theword[c] = char
                print(*(Theword))
            else:
                failed += 1
            c += 1
        if failed == 0:
            print ('the word is: ', word)
            print ('you saved him! congratulations.')
            break

        if guess not in word:
            chances -= 1
            print ('wrong')
            print ('You have', + chances, 'more guesses')

            if chances == 0:
                print('You lost')
                proceed= input('The man got launched to space. if you want to play
again click "y". if you want to exist click "n".')
                if proceed == 'n':
                    repeat = False
                if proceed == 'y':
                    repeat = True
```

Second Authentic task

The second one was about a greenhouse where our task was to propose a system for the client. In our case the client was the corporation Everlast Argo B.V. in the Netherlands. The learning goals I had in this period was learning how to use excel and how to use Flask. Both failed completely since at the end of this period I had no improvement of using them.

In this authentic task I had to read the interview transcript (what was available on Canvas) and make personas based on the interview. Before reading the interviews I had to give an IT solution to their current system. The company wants to maintain the growth environment of the greenhouses for sustainable production and wants to have a sustainable system which shares data anywhere when needed. I thought about using drones which has a sensor inside that captures data while watering the tomatoes. The information the drone sense will be stored inside a csv file and will be displayed in a program for the farmers.

It does sound like a complicated task which is actually the case. I had to use Arduino and it sensed the temperature and humidity thanks to the Python code I wrote. The captured data will be saved in a csv file. After that I had to transfer the csv file into an excel file.

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```
        board.digital_pin_write(5,1)
    else:
        board.digital_pin_write(5,0)

board.set_pin_mode_digital_output(4)
board.set_pin_mode_digital_output(5)

def write_to_csv():
    global data_updated
    global sensor_data
    sensor_data = [last_time, last_humid, last_temp, last_bright]
    if data_updated == True:
        if path.exists('sensor_logs.csv') == False:
            with open('sensor_logs.csv', 'w', newline='') as f:
                writer = csv.writer(f)
                writer.writerow(header)

        with open('sensor_logs.csv', 'a', newline='') as f:
            writer = csv.writer(f, delimiter=',', quotechar='*', quoting=csv.QUOTE_MINIMAL)

            writer.writerow(sensor_data)
        data_updated = False


get_dht_data()
get_ldr_data()
while True:
    write_to_csv()
```

After that I had to display the data in csv file into a website. I had to use Flask for this. This is something I couldn't pull off and ended up with only making a table with written average temperature and humidity.

Third Authentic task

For this task we had to make a group. The groups were made by the teachers and I was in a group of three. After sitting with the group there was something we all did agree on: nobody was good at coding nor any experience. The only thing we were good at was communicating, since the three of us was able to speak Dutch. Since nobody in my group were good at coding I had to step up my game and study HTML, CSS, JavaScript and Flask. The assignment also told us to use Arduino, but that was too much for our group so we didn't use it at all, only explained what we were going to do with it.

We made a website where you, as customer can order pizzas. After that you will get a confirmation screen and then the customer can click on submit. The order is submitted in a text file and is shown in the kitchen screen.

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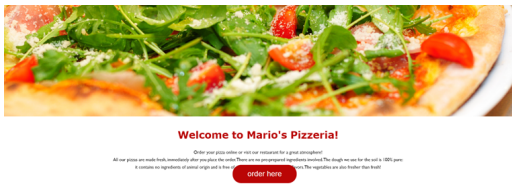

This is our homepage. As you can see the button placement isn't on the right place but that doesn't matter: what's important is the pizza. We also thought it was fun to have a small pizza as the logo. After clicking on the button you will be redirected to the menu. If you click on the button 'add', the flask file will make a .txt file with the added orders. If you scroll done you will see a 'confirm order' screen.