**DESCRIURE’L EN 1-2 MINUTS**

**Briefly describe your project/code in one up to two minute**.

This is my program.

As requested in the instructions, it’s a small Data Explorer Program. It allows the user to load, search, and analyse text-based data (with CSV or TXT).

The program is divided into two modules: main.py and utils.py. The module main.py contains the main flow of the program, while utils.py contains functions used in main.py. So, to run the program, you only need to run main.py.

When the program starts, the user must enter the name of the file he wants to analyse. Then, the user is asked to choose an action from the main menu. The actions are the same 6 actions that the instructions requested.

Each action must be selected writing the number it has assigned. All actions support both TXT and CSV files, except number 5, which requires a CSV file.

The program runs and the code is commented (both for me and for other people to understand it).

I’ve cared about the code to be clean and readable, and also about how the information is displayed in the output. For example, I added white spaces when needed to make the information clearer and I added symbols too.

This has been my first program, so thank you for the opportunity and for your patience.

If the file does not exist, handle the error gracefully.

It’s been challenging, but it’s true that it got easier and easier. It’s my first program. Tank for opportunity.

I did one extra things, but not more because this project was a real challenge for me and I haven’t had enough time to do it.

It important that the program runs, but also how the information is displayed. That’s why I

I didn’t only care about if the code run, but also how is the information displayed.

Preparar un index per a explicar i portar-lo escrit en un paperet

Els documents txt i csv funcionen bé a totes les opcions del menu? Està bé carregar-los com a string o dataframe quan els demano el nom del document o hauria de posar-ho a cada opció del menú?

Trio: cridar if file.endwith csv o if file endswith txt dins de cada funció i dir què fer amb ells.

**SHORT README.TXT explaining how to run your program**

\*Introduction\*

Welcome to my small Data Explorer Program! ^^ This program allows the user to load, search, and analyse text-based data (CSV or TXT).

\*How to run the program\*

The program is divided into two modules: main.py and utils.py. The module main.py contains the main flow of the program, while utils.py contains functions used in main.py. Therefore, to run the program, you only need to run main.py.

\*Menu System\*

When the program starts, the user must enter the name of the file he wants to analyse. Then, the user is asked to choose between different actions from the main menu. The different actions are as follows: “Show basic file information”, “Search for a keyword”, “Count word frequencies”, “Extract information with regular expressions”, “Load as a DataFrame and show basic stats (requirement: CSV file)” and “Quit”. Each action must be selected writing the number it has assigned. All actions support both TXT and CSV files, except number 5, which requires a CSV file.

I hope you enjoy this small Data Explorer Program.

**SOURCES USED**

I’ve used ChatGPT to search for the purposes listed here, but I’ve never asked it to give me the solutions, just the theory to do the project:

* Understand the templates of main.py and utils.py given by the teacher.
* How to separate the treatment that TXT and CSV files receive. I didn’t know “.endswith” and “isinstance()”.
* Understand tracebacks (like the one I got when trying to append rows to a new dataframe. I learned “row.to\_frame().T”.
* Ideas on what type of information can I display about TXT files and CSV files.
* How to iterate through the values of a dataframe.

These are specific internet sources I used:

* Python for Everybody (especially for regex).
* [www.W3schools.com](http://www.W3schools.com) (“Python tutorial” and “Pandas tutorial”)

**DECISIONS**

I used a while loop for the menu because we don’t know how many times the user will want to run the menu. With a while loop I can control when to stop the program with “if statements” and “break”.

**BRUT**

the user is directed to the main menu.

The main menu lets the user choose between different actions.

He agafat         wordsclean = []

        lines\_list = []

els he tret de disn la funció de basic\_infromations, de dins del primer if però abans del for, i els he posat fora de tot per utilitzar-los en la funció seguent.

keyword\_dataframe = keyword\_dataframe.append(row.to\_frame().T)   #to add each row with the keyword to new dataframe, we need to reassign the new dataframe and also convert each row to a new dataframe (because append expects another dataframe or a dictionary)

This is my first program, so I hope you enjoy

*Si ho acabo tot, hi puc incloure un joc o una broma. O alguna cosa que et digui refranys en català aleatoris (carregats des d’un txt creat per mi). Posa-ho al menu aquí al readme si ho fas*

Explicar Com s’ha dividit al codi el tractament de csv i txt