Texto, Carta

Descripción generada automáticamente

Introduction:

This project consists of making a battleship game using python 3.10 and various supported libraries. Among the libraries used in the project is Tkinter (8.6.12). The entire startup interface was made with Tkinter, this includes the registration screen, the about screen, the help screen, and the ship selection screen. The main functions of the home screen are responsible for opening each of the tabs on the home screen. In addition, the VLC library was used for background sound management in the game. A method of code development was used, which consists of implementing the use of different canvas for each window to be displayed, for this we used the .place\_forget() method that allows to forget that a canvas was placed and put another one in its place. Each window function, performs the .place\_forget of the previous canvas and does the .place of the new canva, this for all windows.

Conclusions:

1. Using the Tkinter module for window management and GUI realization is an advantage over pygame.
2. In our case, the use of the .place\_forget method facilitated the management of the windows since it was very easy to create and close them.
3. The use of pre-built images for the help and about windows facilitates the assembly of the help and about windows.
4. The use of OptionMenu and radioButton for the realization of buttons and selectors is a visual and handling advantage over conventional Tkinter buttons.
5. Separating the functions of each type into different files allows you to have a better control of where they are.
6. Separating files into folders helps to have a better control of the program.
7. The use of paint, canva and photoshop allows for optimal image management in terms of image editing.
8. The use of github for version control allows to keep a better control of what is being done and who is doing it.
9. The use of Visual Studio Code and PyCharm extensions allows for better management of github version control.
10. The use of pyfirmata to control the arduino with python is much better than any other module for the same purpose.

Recommendations:

1. We recommend the use of pygame for the game, as this allows to simplify the handling of all the functions for the game.
2. It is recommended to use the VLC library for sound management, as it is more intuitive than pygame.
3. It is recommended to start work of this caliber earlier to improve performance.
4. We recommend the use of github for version management to work in a better way.
5. The use of github is recommended for the development of the logbook as it allows an efficient management of the changes.
6. The use of discord for meetings is recommended because it is very efficient.

Results analysis:

Diagrama

Descripción generada automáticamente

Test protocol:

Each button was tested to ensure that it worked correctly with each of its functions.

Data handling functions were tested with temporary files