1. Defining the problem

"Global Operation" is a seasonal event of a FPS game called "Warface". Usually, each season of event lasts for 3-4 months and then follows by a 2-3 month break. In the "Global Operation", the player will be asked to finish all kinds of objectives to get the reward. At the same time, there is a type of mission called "character mission". This type of mission does not require the player to actually play the game or manimupate the character, all they will do is to select the mission, and then press "start", then wait for the timeout. Compared to normal mission, it's more like "checking in" after a period of time, upon a successful completion of mission, the player will receive a random reward. Starting a "character mission" will cost player "energy", which will restore automatically for 3 points each hour, or can be fully restored with "battle points" - a type of currency in the event.

Obviously, restarting a "character" mission every 15 to 60 minutes can be a huge human effort, and the player also will not be able to restart the mission when they cannot access the website, this has annoyed a lot of Warface player for a long time, and finally, a close friend of mine, who plays this game came to me, and asks me whether I can write a automation program to restart the mission periodically automatically, so he has more chance to get better rewards with less effort. I agreed to help him and decided to turn this into my CS IA.

2. Rationale for the proposed product

I chose to develop a program using Python, using Sublime Text as IDE. The reason why I chose to use python is because of its great portability and having the features of OOP. After a discussion with my client, I will be developing a program that can login to the game server, and let the user to choose the mission, the difficulty and whether to refill the energy automatically to farm. After the configuration, the program will also has a Dashboard allowing the client to stop or reconfigure the program at any time, as well as logging the rewards the user get from the K.I.W.I. event. The GUI framework I chose to use is TK as it's available on almost all the platforms, and it can be easily utilized with Python's tkinter module. Inheritance will be used to create Frames and utilize them as pages to instruct the user from inputting login information to starting the automation.

3. Success criteria

The following criterias are applied during the development of the program per the requirement of the client:

- User friendly GUI and instruction
- The program should be able to login to the game server and check the status of event character, including energy, currency, and bonus skills
- The program should check the login state and the event access status for the user
- The program should allow the user to configure the mission, difficulty and whether to refill the energy automatically

- On the Dashboard page, the program should clearly indicate the mission and the difficulty the user is farming
- The program should allow the user to re-configure any time the user wants
- The program should clearly list down the rewards the user get from the event during the farming
- The program should be able to automatically re-login in case login session expires
- The program should be able to create separate log for different accounts/users

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