

Name: Yiluo Liu

Student ID: 1TE19249R

Project Report

This application works for the game named *Genshin Impact*. It is an open-world, action RPG and published by miHoYo. Before I talked about my project, I want to share two questions. What should a good application look like? And how many functions should a good application have?

In *Genshin Impact*, you can level up and ascend your characters by



using mora and materials. However, players often complain that it is difficult to calculate the number of materials required. Also, there are too many characters and different kinds of materials. Players feel hard to check the materials for every characters. Therefore, I made this application

named *Genshin Impact Calculator* for players to calculate the number of materials and check the materials easily. Here are examples.

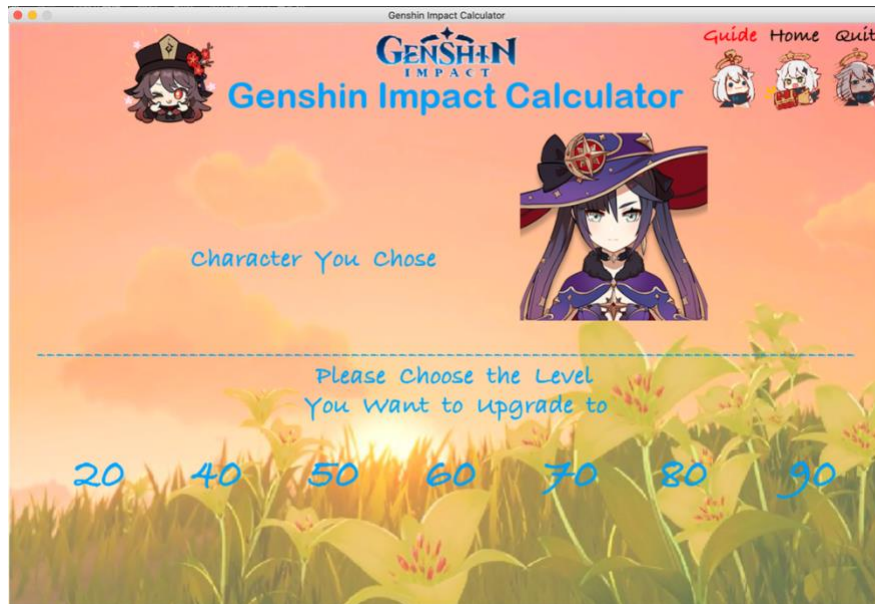


Then, I would like to talk about how to use the application. First, in the home page, users can simply choose the element and character they want



to calculate. Also, users can click the guide button on the upper right corner to check the guide. Users can check the guide page at any time. After choosing the character, users need to choose the level they want to level up

to. All options are based on the game content. Thus, users can simply choose the best match. After choosing the level, they will get the result.



They can easily check the mora, exp, and materials they need to prepare for their characters. Also, Users can go back to homepage at any time by clicking the Home button on the upper right corner.



Back to the questions I mentioned before. What should a good application look like? And how many functions should a good application have? These two questions relate to my point of my application and future improvements. First, I think the application should have clear guidance and interface. Users can directly find their needs in the application. Thus, I created a guide page and tried to have less words. Second, users should be able to find all their needs in the application. Thus, the application should consider what kinds of function should it have. Therefore, my application needs improvements. For example, it cannot calculate the materials for weapons and talents in the game. Also, it cannot allow users to choose precise starting level, such as from level 40 to 90. Moreover, the interface is simple. It doesn't have any other functions right now.

Finally, I would like to talk about resources I used for this application. Basically, I use Pygame to create the interface and functions. Pygame is a really easy library for user to make game so I use it for loading images and drawing, I found the tutorial from its official website. It gives clear and useful introduction and has many example codes. I use class function to save the information of numbers of materials and money. And use several functions based on Pygame to draw the background and load in images. Also, I really want to learn Tkinter which is a really strong library for creating interface. I would like to try to use it to make my application better.