

# Criterion A: Planning

## The scenario

My client is my classmate Mary, she is playing the video game “Civilization VI”. In this game, there are 47 heroes (civilizations), several players are participating in the match.

She is playing this game on a daily basis with her friends, nevertheless, they spent a lot of time not playing but arguing. People want to have the same heroes, hence starting debates about who should pick them. Such arguing can take a lot of time and there is no concise solution to this problem. Moreover, some heroes are overpowered and if all players have the same mastery, the one who chose them will win.

Since Mary was describing all those problems, I understood that this all could be solved by a program, I saw an opportunity in making out of this internal assessment for computer science. Thus, I made an appointment to discuss it with my teacher, and identify what problems the product should resolve. Summarizing, the product should be developed to overcome arguings, save time on justly distributing civilizations, and neutralize overpowered heroes.

To understand the problem better and analyze other views on its solution, I decided to play this game myself, take more interviews with Mary and my Computer Science teacher.<sup>1</sup>

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<sup>1</sup> Appendix 1; First interview with mary

## Rationale for proposed solution

An input that the user should give is a number of participants, number of nations per player, and bans if required. And output which the program should give is a table that could be copied and shared between players, which is conveniently showing banned and available to each player nations. To create my product more efficiently and faster I will use Python, since I have studied it at school, it is user friendly, has many useful libraries, and mainly, it is suitable for connection to databases. To keep data I am using SQLite3, because it is simple to use, it is convenient to transfer to other computers. To create the GUI I will use Python library Tkinter, because it is already in the app and it has convenient widgets for me and Random for reorganizing the order of the civilizations.

## Success criteria

1. Displaying a set of civilizations depending on the choosed version, thus users don't need to make a lot of bans of heroes that are not available for him
2. Providing a convenient list of civilizations sorted by alphabetical order, making it faster and simpler to find civilizations
3. Having a description of each civilization for users to navigate better in their abilities and making more relevant bans
4. Ability to vary the number of civilizations available for the player
5. Ability to vary the number of players for which the random distribution should be done
6. Outputting an error warning messages, so the user could solve it independently
7. Outputting a visual table with a set of available nations for each player

8. Adding new civilizations by the users in the versions sets, for being independent of official game updates
9. Having a table of most frequently made bans, thus new players could do relevant as well, hence not leaving overpowered civilizations in the game and bringing imbalance
10. Having contact information in case of a problem that cannot be solved by the user independently
11. Have a simple and visually intuitive design of the program<sup>2</sup>

**word count: 545**

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<sup>2</sup> Appendix 4; Second interview with Computer Science teacher