

Data Structures

PROJECT PROPOSAL

Genshin Impact

Artifact Rater

Prepared by:

Kokopium

(Tiffany & Nicholas)

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Computer Science Program

Binus University International

Team Introduction

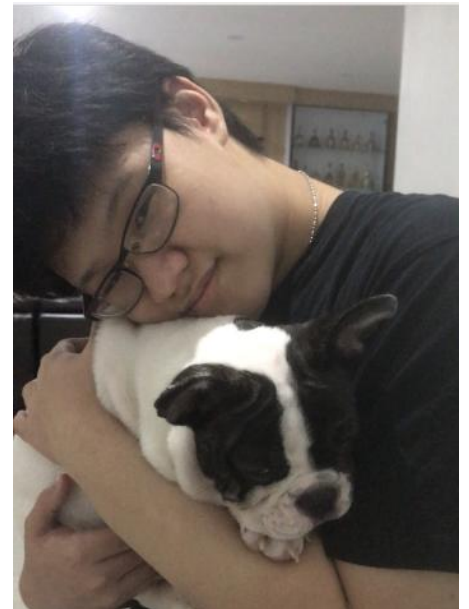
About Kokopium

We aim to help Genshin Impact players rate the quality of their artifacts and help them decide which artifacts are worthy for their characters to use. Our team consists of two people who have experience collaborating together on previous projects. Those experiences have assisted us in improving our collaboration skills as we get to know each of our own weaknesses and strengths. For instance, Nick is an efficient and speedy worker while Tiffany is careful with the quality of work and is always aware of set deadlines. We believe we will give the players a more convenient time with decision-making when it comes to keeping and throwing away artifacts through the outcome of this project.

NAME: Nicholas Budiman (Nick)

Brief Description: 16 Years old, Dog lover, Efficient Worker, Gamer.

Project Experience: HCI Final Project (Focal point member), Case Study PDM Project member, Created Snake game with Pygame.



NAME: Tiffany Widjaja

Brief Description: 18 years old, Gamer.

Project Experience: HCI Final Project (Focal point member), Case Study PDM Project member, Created FlappaMEW for AlgoProg Final Project.

Background

We have chosen this problem as many on Genshin Impact struggle to decide on which “artifacts”(artifacts are items in Genshin Impact that help increase character statistics and help characters survive more and deal damage) to keep, thus this system will help lots of newer Genshin Impact players decide on the artifacts they would like to keep and throw away based on our rating system. We have chosen this problem as many of our friends often ask us if an artifact is worth keeping or leveling up, and also because we understand the struggles of new players when it comes to deciding on which of these pieces they should keep or even level up. This program aims to make your Genshin Impact experience easier and more efficient by rating your artifacts and making sure you don't invest your resources on useless artifact pieces. This project is worth doing as Genshin Impact is a game that “Time gates” (Time gating is an action in which game developers design the game progress to be limited by time despite your efforts or your skill). Therefore it is important to use your resources to the fullest and most efficient methods. We chose to solve this problem by creating a program that lets users list down their artifact type, artifact set, artifact stat, and artifact sub-stats, which we will then store in an ADT along with an additional artifact rating (artifact rating is how valuable we determine the artifacts to be) This can be pictured as an artifact dictionary for users that will also help them decide which artifacts to keep and which artifacts to let go off.

Motivation

This problem is interesting as Genshin Impact is currently one of the most popular games in the world with approximately 9 million users being active daily out of the 60 million registered users. Therefore helping this huge community of players that may even have to spend money in order to make their characters stronger can really make a huge impact on the gaming community. One other motivation is because we ourselves have experienced what it is like to struggle with deciding which artifacts to keep, and over-investing in non-worth artifacts.

Aims

Our aim is to create a program that allows users to register their artifact pieces, with the types of artifacts, and artifact stats, that we will then use to determine the values of this artifact and store them within an ADT. Where the users can manage all of their artifact pieces and make decisions on which artifacts to sacrifice and which artifacts to keep. Here is an illustration.

Lvl	Rarity	Name	Main Stat	Crit Value	Set
20	5	Zhongli's Goblet	GeoDmg	45	Archaic Petra
20	5	HuTao's Timepiece	Atk%	47	Crimson Witch of Flames

Our rating system is based on the CV (Crit Value) calculation With the lowest ratings being 0 - 10, average being 10 - 20, decent being 20 - 30, Very good being 30 - 40 and Jewels being 40 - 50, and godly being 50 - 60.

Scope

We will deliver a simple solution to a complex problem, and present players with a possible solution to managing and maintaining their artifacts and resources in a better way and at a better and easier level. However we will not be making the most aesthetically pleasing program as the program would mainly be a console program that is not very concerned about the visual aspect rather more about its functionality, We are also not going to be resolving the RNG(luck factor) problem that Genshin Impact has, instead we are delivering a solution that will make it more bearable and manageable.

Activity Plan

This schedule is subject to change

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7		Created the proposal	Proposal submission	Exam Break	Initial design planning	Weekend break	Weekend break
8	Study for exams	Exam Break	Start project	Create Constructor	Create Functions	Weekend break	Weekend break
9	Continue project	break	Continue project	break	Continue project	Weekend break	Weekend break
10	Continue project	Break	Continue project	break	Continue project	Weekend break	Weekend break
11	Program completed (without debugging)	Break.	Debugging	Debugging	Debugging	Weekend break	Weekend break
12	Debugging	Debugging	Expected final finishes date	1st revision	2nd revision	Weekend break	Final Revision