Plagiarism Declaration and Assignment Cover Sheet

ESSAY COVER SHEET

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Plagiarism declaration

1. I know that plagiarism is wrong. Plagiarism is to use another's work and to pretend that it is one's own.

2. I have used the author date convention for citation and referencing. Each significant contribution to and quotation in this essay from the work or works of other people has been acknowledged through citation and reference.

3. This essay is my own work.

4. I have not submitted this work, or a substantial portion thereof, for assessment previously.

5. I have not allowed and will not allow anyone to copy my work with the intention of passing it off as his or her own work.

6. I have done the word processing and formatting of this assignment myself. I understand that the correct formatting is part of the mark for this assignment and that it is therefore wrong for another person to do it for me.

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The MDA framework is an analysis system that allows researchers to separates each causally linked component of a game, as stated by LeBlanc (2004). The MDA framework views the Mechanics, Dynamics and Aesthetic generalized components that form a game from the perspectives of both the developer and user. The mechanics of a game are the controls that are given to the user to interact with the game, being able to control an avatar through input. The dynamics arise from this input, dynamics aim to create the aesthetic experiences, challenge and tension are two examples of these dynamics. The aesthetic component of the MDA is not only visual; it is an experiential and emotional connection between the game and the user (Hunicke et al, 2004).

This framework allows researchers to analyse the unpredictable nature of games using a standardized approach.

This analysis will utilize the MDA framework to analyse the data design within the series of *Pokémon* games, it will focus on the design on the original games instead of their modern adaptations.

A game is a system that processes data and then presents it to the player in a format that is meant to be understandable, this level of understanding varies depending on the level of complexity of data as well as how the developers have chosen to represent it. Certain games present the data in a simple format such as the damage statistics of a weapon or the in-game currency that the player has available. Data is not only the statistics given to the player or the player's input that informs the system that the avatar must move in the x direction at a speed of y or to update the player's score. It is also the level design, placement of meshes, animation frames, the positional data of UI elements and the overall UX. Data systems are both simple and incredibly complex. This data is not only used to enable a game, it can also be used to alter and analyse a game, above and beyond the data behind the mechanics and dynamics, aesthetics can also be measured within the data design of a game. Looking past the visual and audio data that gives a game its "audio-visual aesthetic" aesthetic in relation to MDA can be measured by the "fun" the player has when interacting with a game, fun cannot be necessarily measured but it can be quantified using words such as: sensation, challenge, narrative, fantasy and expression (Hunicke et al, 2004).

Within the context of *Pokémon* this essay will primarily discuss the data represented to the player as well as the hidden data systems being used during a single battle. The battle will be traditional, between the player and a single opponent. The first set of data that is chosen in the battle is the Pokémon itself, the player will choose a "favourite" Pokémon that will always be the first Pokémon deployed in a battle. The Pokémon chosen can be changed between battles and depending on the playstyle and knowledge of the player, for example if the player knows they will be fighting a lot of fire type Pokémon they will equip water type Pokémon to inflict the most damage against Pokémon of the opposing type.

The next data that is used by the system is the speed stat of each starting Pokémon, this stat decides who will make the first move. This stat is not explained to the player and it can be altered during the match, this could allow a Pokémon to go again. In traditional battles this stat does not necessarily affect the outcome of the battle unless the player's strategy involves having to go first or else, they lose the encounter. The speed stat only really plays a part when there are multiple opponents or Pokémon in a single battle, resulting in one team attacking with all their Pokémon before the turn changes.

The data systems that have been discussed are all classified as common systems, these can be found in every game in various formats, the next set of data utilized in a traditional Pokémon battle is the UI and UX. Displaying the Pokémon's name, health, level, and type; these inform the next set of choices that will be made by the player and system. The player will then be able to choose to attack, access their backpack for consumable items to use during the battle, switch Pokémon or abandon the battle. If the player chooses to attack, they will then choose an ability for their Pokémon to use; these abilities are data systems. These abilities can deal damage that is affected by type: increasing and decreasing or dealing the normal damage, increase and decrease their own and the opponent's statistics, respectively. The number of times a Pokémon can use these abilities is also restricted by move type and the Pokémon's level. These statistics do not reset after a battle unless the player uses an item or heals the Pokémon at a Poké Center, this in turn will affect the choices the player then makes in response to the data they have been given after the battle's outcome is decided. This representation of data allows for a smooth interaction with the various data systems that control the game.

Many other data systems, both common and uncommon exist with Pokémon such as: the encounter type and rate while walking through the long grass, the rate at which your Pokémon will level up and the experience points gained after each battle, the chance that you will capture a Pokémon in a ball and many more. Most of the data design is hidden from the player and such can be analysed using the mechanics and aesthetic components of the MDA framework. Mechanically you are interacting with numbers, if x = y then you will encounter Pokémon z, aesthetically the player will respond to this since they have been trying to catch that Pokémon or they will flee the battle and continue to get x = y. They will do this by moving their avatar around in an area that Pokémon z can be encountered, the player may know that they are in the right area either by interacting with characters in the world or researching this, but they still need to interact with the system to get the outcome they want. This interaction results in the creation of an aesthetic of challenge, excitement, and tension; the aesthetics are formed from the rum-time behaviour of the player's interaction with the system mechanics, otherwise known as the dynamics (Hunicke et al, 2004).

Mechanically the data design of *Pokémon* is based around allowing the player the freedom to interact with the data systems in a controlled manner. The player is made aware that encounters with wild Pokémon are random, yet the player can navigate to a new area that allows for interaction with new Pokémon giving the player a choice as well as sense of progression.

The progression is also displayed in the statistics of their Pokémon as they level up and the less gameplay important details displayed by their own statistics: Pokédex entries and Pokémon caught. These mechanical and dynamic elements work to create the structured aesthetics of challenge, narrative and discovery.

References

Hunicke, Robin & Leblanc, Marc & Zubek, Robert. (2004). MDA: A Formal Approach to Game Design and Game Research. AAAI Workshop - Technical Report. 1.

Game Freak (1996) *Pokémon.* [Digital Game]. [Multiple platforms]. Tokyo: Nintendo.