CIS 452 01 – Assignment 9 Reflection

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Starting Scene: Game

GitHub Link: <https://github.com/jburi/CIS_452_Elemental_Commander>

Simmer.io Link: <https://simmer.io/@jburi/elemental-commander>

1. What does the player do in the game that determines which Creator class is used to create objects?
   * The game determines if the Enemy or Player wants to spawn a unit and chooses the correct creator class.
2. What determines which Product object the Creator class creates (with the Factory Method design pattern) while the game is running? Does the player choose the object or does the game choose the object based on something the player does? In other words, what sets the condition that is checked by the factory method?
   * The player selects which element they want the unit to have and the enemy spawns a unit with a random element.
3. What were the benefits of using the Factory Method to make your mini-game?
   * For the very specific cases it can be useful. The example of different types of equipment in different shops made a lot of sense to me.
4. Did you find any drawbacks to using the Factory Method Pattern? If so, what were they?
   * This was by far the most challenging pattern for me. It was difficult to understand what the pattern does after several examples and even more so to think of a concept to use this pattern.
5. What is the player’s goal in your mini-game and what makes it challenging?
   * The goal is to use your units and yourself to defeat the enemy’s units.
6. How does the game communicate its goal(s) to the player?
   * I created a menu before the game starts explaining the game and controls.
7. How can the player fail at the game and how does the game detect it?
   * If you let too many units die, your health will reach zero.
8. How does the game give players feedback about how well they are doing?
   * Each unit and players have individual health bars.

**UML Diagram**

