Logan Ross Assignment 5 2/28/2021

Assignment 5

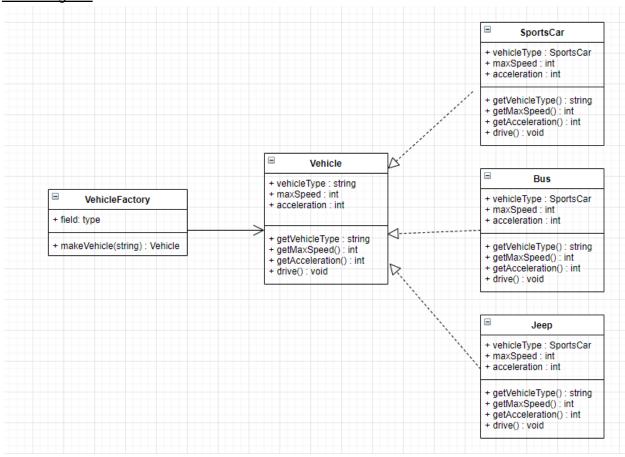
Extra Information

Simmer.io - https://simmer.io/@Lross/assignment-5-factory-design

Github repo - https://github.com/LoganRossBradley/CIS497-assingment-5

Scene to open - MainScene NewUnityProject/Assets/Scenes/MainScene

UML Diagram



Reflective Questions

- 1. Briefly, what was the game feature you chose to create
 - -The player can randomly generate cars, each of which is different in how fast it can go as well as how quickly it accelerates

- 2. What is the player able to do with the game feature you chose to create? What goal are they able to achieve with it and for what purpose?
 - -The player can generate cars
- 3. What does the player do in the game that creates an object of a specific type? Pressing space creates objects of the "Vehicle" type
- 4. What determines which object is created (with the Simple Factory 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?
 - -A random number generator is what determines which type of vehicle is created
- 5. What were the benefits of using the Simple Factory Pattern to make your Unity Project implementing a game feature?
 - -Reduced code needed in each Vehicle object class and would make implementing new Vehicles much easier.
- 6. Did you find any drawbacks to using the Simple Factory Pattern? If so, what were they?

 -There were some small things that made it difficult to implement initially but those were just because I was unfamiliar with this type of design pattern. i didn't find any drawbacks while implementing the feature
- 7. How is the goal of the game feature communicated to the player in your unity project?

 -Using UI text on the canvas
- 8. How are the controls required to use the game feature you created communicated to the player in your unity project?
 - -Using UI text on the canvas
- 9. How does the game communicate to players whether or not they have successfully used the game feature?
 - -Players will see the vehicle that was created driving across the screen