Rickey Otano

Intro to C++ through game programming

**Final Project:** *Zombies*

The theme behind this game was to create a console based zombies game that mimics call of duty zombies.

The game is separated into 4 classes

* Perks
* Weapons
* Player
* Location

**Perk:**

The perks class is the base class that allows me to create faux perks that the user can buy. Due to time constraints I couldn’t code them to actually do anything. The class has methods to set the perks name, cost, if it’s enabled, the modifier type, and the amount it’s modifying the attribute. It contains two constructors, one blank, and one that creates a full blown perk object with a name, cost, mod type and mod amount.

**Weapons:**

The weapons class is the base class that can be used to create a gun. It features methods that apply to gun state (zoomed in, zoomed out), how it was bought, gun damage, gun class, gun firing mode, and mobility while using the gun. It has two constructors, one blank, and one that makes a gun with all the needed attributes.

**Player:**

The player class inherits both the perks and weapons class so it can create lists of each. They serve as an inventory/ item list of those objects. The player class has everything needed to create a player. Also uses Location class to set and track player location.

**Location:**

The location class inherits a struct and is used to create a 3d point location using Cartesian point system.

Besides the classes I created separate enum headers for each class to have a better separation of code and data types. There is a union used for game versioning. So far the game lets you create a player, assign it a name and add perks. The perks list only holds perks that are not already bought so there are no duplicates. I wanted to show some skill in c++ by using unions, structs, and multiple inheritance. I also demonstrated the use of header files and separation of data types to make it easier to extend them at a later date without having to hunt them down in a class file.