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Cancelled Class Assignment

The four things you can do do with derived classes using inheritance are 1: Adding new functionality, 2 redefining functionality,3 adding to existing functionality, and 4 hiding functionality. To add new functionality you would need to derive your own class and add the new functionality in that derived class. To redefine functionality functions can be rewritten in derived classes so that they can perform different task for that specific class. To add to existing functionality functions are called from base classes inside of derived classes then new functionality is added, so the new function calls the function from the base class then after that it executes the new functionality. To hide functionality a function in a derived class can be redefined to be private in that derived class.

OOP is a style of programming that focuses on creating objects. The principle of cohesion is the concept of creating code that is reusable and like code that is grouped together to guarantee that each function performs a single task. Cohesion is important because it makes code maintainable and easier to reuse. Coupling is the principle of keeping objects more independent of each other and not easily changing the state or behavior of other objects. Loose coupling is objects that are not tightly related and tight coupling is where objects are more dependent on each other. Loose coupling is good and tight coupling is bad. Coupling is important because it helps keep code working more smoothly as well as making code easier to change. Encapsulation is the principle of information hiding. Encapsulation is important because it helps create loosely coupled code as well as preventing the ripple effect of code changes. It creates less work when making a change in your code. Abstraction is the principle of shrinking things into more general forms. Abstraction is important because it can help you get to a general form of code that can be used in more than one specific place therefore reducing redundant code. Inheritance is the principle of class hierarchy. Inheritance is important because it allows you to create new similar objects without having to rewrite the code that the objects share.

Version control is important because it allows you to keep track of changes you’ve made over time which in turn can make it much easier to find where you went wrong if you’ve broken your code. Also version control allows you to work on projects simultaneously which can make things much easier in group work. I think this would have changed our fightopia assignment in that we wouldn’t have had to copy and paste so much of each other’s code. It would also have been easier to identify when and changes were made and by who the changes were made. I think we would have been able to make more progress on the fightopia assignment.