Week 5

Abstraction is a way to reduce complexity and allow efficient design and implementation in complex software systems. Abstraction helps the user to avoid writing low level cod. It helps avoid duplication and increases reusability of code.

Encapsulation is the packing of data into one component and the controlling access to that component.

Inheritance is where a code class inherits all the methods from another class.

Polymorphism is the presentation of one interface for multiple data types. For example, making a class responsible for its own code as well as well as its own data make it polymorphic because it has its own function that behaves properly for any object.

The relationship between a class and an object is like a parent and a child. The class is the starting point, whereas the object is the details inside that class. Such as height, eye color, left or right-handed, or maybe even hair color.

An exception is an error condition or unexpected behavior in code that can be encountered when a program executes. The best way to handle them is to design the code with the exceptions in mind and try to code a way to avoid them.

My favorite thing I learned this week was how to code a selection menu. I have played around with it so much because it reminds me of choosing a character and customizing them in a video game. Most of the time you get to pick different options for your character like race, class, abilities, etc.... Learning how to do this was a fun way to play with code and make it more entertaining than just learning a new thing. It was a way for me to make it interactive.

References

MDN Web Docs (mozilla.org)

Best Place For Technologies And Academics Tutorial (w3schools.blog)