Object Oriented Programming

Pass Task 6.2: Key Object-Oriented Concepts

Concept

1. Abstraction: Means that focusing on the main important points while hiding the unwanted parts of the code. This will be easy for the user to access and get what they wanted to do immediately. When it comes to the real world problem, when we get a phone we can do many things done with it like we can call someone, we can capture the golden moments in our lives and also we can either play games on it or browse the internet and can watch what we want. But while we are doing it, we cannot see the process of how those are being done in there. So, we get this as the real-world example.

2. Encapsulation: This means the idea of the bundling data and methods that work on that data within one unit. So, through this we can wrap up data and member function(method) together into a one single unit. For a real-world example, we can get the key to your room. With the key only you can access to your room and no other one can.

3. Inheritance: Inheritance means the mechanism of acquiring the properties and the behaviors from the parent class to child class. For example, a child inherits the traits of their parents.

4. Polymorphism: Polymorphism mean that the ability to take on many forms. So, it allows the diverse types to be treated as objects of common class. So, if we get an example if we get a girl, she can be a mother, student, and a nurse at the same time.