

1. Research the SOLID principles of Object-Oriented Programming (OOP) as introduced by Robert Martin

The five SOLID principles of OOP are Single Responsibility Principle (SRP), Open-Close Principle (OCP), Liskov Substitution Principle (LSP), Interface Segregation Principle (ISP), Dependency Inversion Principle (DIP). SRP translates to making sure that your methods or classes have specific functions that make your code easy to read and organized. OCP translates to being able to easily use your methods or classes or "extend" them, but the source code stays in-tact and doesn't need to be edited. LSP translates to parent classes and subclasses. Basically, if "X" is a subtype of "Y", then objects of type "Y" should be replaced with objects of type "X". ISP translates to having multiple interfaces that can be used for different classes instead of having one large interface, forcing multiple classes to inherit all the methods. DIP translates to making sure that high-level classes should not depend on low-level classes, instead they should rely on abstraction.

3. What is your favorite thing you learned this week?

My favorite thing I learned this week was how to connect to a database. I've always been interested in learning about databases and servers. When I was younger I did a lot of port forwarding when it came to video games and playing on a server with my friends so that makes learning about ports and databases a lot more interesting for me.

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