## Asha Abdulkadir Week7 Research

The Solid principles of Objected-Oriented Programming as introduced by Robert Martin are five set of rules and best practices to follow while designing a class structure and they form the SOLID acronym which are: Single Responsibility Principle, Open-Close principle, Liskov Substitution Principle, Interface Segregation Principle, and Dependency Inversion Principle. They are guidelines for software development.

Single Responsibility Principle states that a class should do one thing and therefore it should have only a single reason to change. Only one change in the software specification should affect the specification of class.

Open-Closed Principle states that Objects or entities should be open for extension but closed for modification. Modification meaning changing the code of an existing class and extension meaning adding new functionality.

Liskov Substitution Principle states let q(x) be a property provable about of x of type T. Then q(y) should be provable for objects of type S where S is a subtype of T.

Interface Segregation Principle states a client should never be forced to implement an interface that it doesn't use, or clients shouldn't be forced to depend on methods they do not use. It is about separating the interfaces.

Dependency Inversion Principle states entities must depend on abstractions, not on concretions. It states that the high-level module must not depend on the low-level module, but they should depend on abstractions

Wildcards in MySQL are characters that allow us to search complex data from the table very easily and quickly. Some of its usefulness are: It improves performance of an application, saves time in filtering records from the table. Makes use of complex queries into simple ones veery easily and quickly, allows us to develop powerful search engines into the large data-driven application.

## Reference:

https://www.freecodecamp.org/news/solid-principles-explained-in-plain-english/

https://www.alpharithms.com/solid-guidelines-for-better-software-development-055500/

https://www.javatpoint.com/mysql-wildcards