## Assignmnet-3

Q1. Explain Dependency Injection and its types? Ans:

Dependency Injection is a technique where one object supplies the dependencies of nother object. Here dependency is a kind of service and injection is a client meaning something tells the client which service to use rather than client defining their own service or finding another one.

It involves 4 roles:

**service**: it is an object to be used

**client**: object depending upon the services

interfaces: defines how clients may use those services

**injector**: responsible for constructing the services and injecting them into

the client.

Types of Dependency Injection are:

## **Constructor Injection:**

This method requires the client to provide a parameter in a constructor for the dependency.

## **Setter Injection:**

This method requires the client to provide a setter method for the dependency.

## **Interface Injection:**

This method is simply client publishing a role interface to the setter methods of the client's dependencies. It can be used to establish how the inector should talk to the client when injecting dependencies.

References

Dependency\_injection, Wikipedia