**Lesson28 Why dependency injection**

**\*The Benefits of the Dependency Injection**

**1-Create applications that are easy to write and maintain overtime as the application evolve**

**2-Easy to share data and functionality as the angular injector provides singleton (single instance of service)**

**3-Easy to write and maintain unit tests as the dependencies**

**For First Point**

//Problem 1: This code have several problem such as the problem of unit testing by providing dependency inside

//dependency so image that if we have dependency inside dependency and so on ==> make complex dependency

//Problem 2: its make hard maintain that if we update the constructor by adding the parameter

//so that we have insert the same update on the Computer class

export class Computer {

private processor: Processor;

constructor() {

this.processor = new Processor();}}

export class Processor {

constructor() {}}

**The Solution by applying the Dependency Injection that make instance of object externally and inject it to the Computer class**

export class Computer {

//we see that when change the Processor Constructor parameter, the Computer does not need to change

constructor(private processor: Processor) {

}}

export class Processor {

constructor() {}}

**For Second Point**

**1-The Dependency Injection provide Singleton (Single Instance of Service)**

**🡺This means that we apply the same instance of service is shared on all the components**

EmployeeService

EmpList

SelectedEmployee

Component 3

Component 2

Component 1