

Dependency Injection

What is it? Why should I use it?

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“Dependency Injection” is a 25-dollar term for
a 5-cent concept.”

—James Shore

High level modules should not depend on
low level modules.

Both of them should depend on abstractions.

Goals of DI

- Loose coupling between objects
- Testability
- Maintainability
- Parallel Development (interface contract)

Types of DI

- Constructor Injection
- Factory
- Container

Containers

- Autofac
- Unity
- Ninject
- ASP.NET Core - built-in

Great with Mocking!

- MOQ
- JustMock
- RhinoMocks
- FakeItEasy

Demo

Database Agnosticism

And now....

An example with
Ninja Turtles



Additional Resources

Martin Fowler on IoC & DI

<http://www.martinfowler.com/articles/injection.html>

James Shore - Dependency Injection Demystified

<http://www.jamesshore.com/Blog/Dependency-Injection-Demystified.html>

Dependency Injection Fundamentals

<https://docs.microsoft.com/en-us/aspnet/core/fundamentals/dependency-injection>

Service Locator Pattern

<https://msdn.microsoft.com/en-us/library/ff648968.aspx>

Dependency Injection Dojo

<https://github.com/ballance/DependencyInjectionDojo>

Questions?