Cheatography

Unity Container Cheat Sheet

by Greg Finzer (GregFinzer) via cheatography.com/15280/cs/28266/

Essential Links

Unity NuGet Package	https://www.nuget.org/packages/Unity/
Unity Registration by Convention NuGet Package	https://www.nuget.org/packages/Unity.RegistrationByConvention/
Overview	https://www.tutorialsteacher.com/ioc/unity-container
GitHub Repo	https://github.com/unitycontainer/unity

Example Code

```
public interface ICar
{
   int Run();
}
public class Car : ICar
{
    private int _miles;
    public int Run()
   {
        return ++_miles;
   }
}
public class Driver
{
    private ICar _car;
    public Driver (ICar car)
   {
       _car = car;
   }
    public void RunCar()
   {
        Con sol e.W rit eLi ne( " Running {0} - {1}
mile ", _car.G etT ype ().N ame, _car.R un());
   }
}
```

Register and Resolve

```
IUnityContainer container = new UnityContainer();
contai ner.Re gis ter Typ e<ICar, Car>();
//Resolves depend encies and returns the Driver
Driver driver= contai ner.Re sol ve< Dri ver >();
driver.Ru nCar();
```

Constructor Injection

```
[InjectionConstructor]
public Driver (ICar car)
{
       _car = car;
}
```

Property Injection

```
[Dependency]
public ICar Car { get; set; }
```

Register Types

```
//NuGet Package Unity.RegistrationByConvention
//The interface and class names must match
//ICar and Car
public static void Regist erT ype s(I Uni tyC ont -
ainer container)
{
    con tai ner.Re gis ter Types(
        All Cla sse s.F rom Loa ded Ass emb lies(),
        Wit hMa ppi ngs.Fr omM atc hin gIn ter -
face,
        Wit hNa me.D ef ault);
}
```

Register Types In Assembly

```
RegisterTypesInAssembly(container,
typeof (Ca r).A ss embly);
public static void Regist erT ype sIn Ass embly
(IUnit yCo ntainer container, Assembly assembly)
{
    IEn ume rab le< Typ e> types = assemb ly.G et -
Types()
       .Wh ere(o => o.IsClass
                    && !o.IsG ene ricType
                    && !o.IsA bstract
                    && o.GetI nte rfa ces ().A -
ny());
    foreach (Type type in types)
   {
        con tai ner.Re gis ter Typ e(t ype.Ge tIn -
ter faces()
           .Fi rst(), type);
   }
}
```

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