

C# and the DLR

A Dynamic Duo



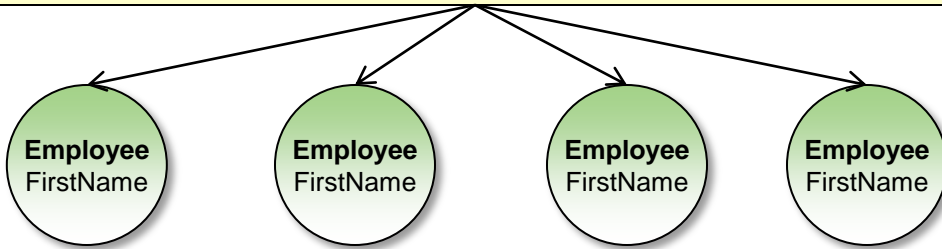
Why Dynamic?

Static	Dynamic
C / C++	JavaScript
Java	Ruby
C#	Python
F#	PHP
Haskell	Perl

```
var result = int.Parse("42") * 2;
```

```
var result = "42" * 2;
```

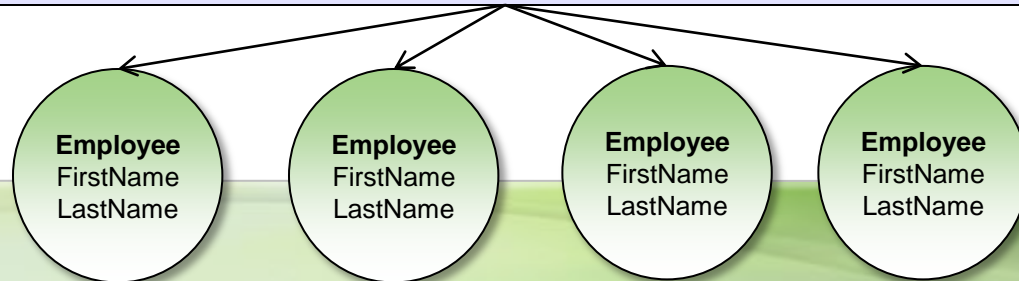
```
public class Employee
{
    public string FirstName { get; set; }
}
```



```
class Employee
    attr_accessor :firstName
end

...

Employee.class_eval { attr_accessor :lastName }
```





dynamic

```
dynamic employee = new Employee();  
employee.FirstName = "Scott";  
Console.WriteLine(employee.FirstName);
```

ExpandoObject

```
var doc = XmlDocument.Load("Employees.xml").AsExpando();  
foreach (var employee in doc.Employees)  
{  
    Console.WriteLine(employee.FirstName);  
}
```

DynamicObject

```
public override bool TryGetMember(GetMemberBinder binder,
                                   out object result)
{
    var xml = _xml.Element(binder.Name);
    if (xml != null)
    {
        result = new DynamicXml(xml);
        return true;
    }

    result = null;
    return false;
}
```

Dynamic Language Interop



IronPython



C# and the DLR

- **The DLR**
 - New languages
 - Better interop
 - Better syntax!