

Advanced Topics



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Coming Up



Security implications from past to present

**Working towards cleaner code with
ReflectionMagic**



CAS (Code Access Security)

A security mechanism which enables different levels of trust for your code to help protect systems from malicious code



Security Implications from Past to Present

Reflection was influenced by CAS

- `SecurityCritical` attribute
- `ReflectionPermissionFlag` enumeration

.NET no longer supports or honors these



Security Implications from Past to Present

The reflection-only context allowed loading assemblies for inspection but not execution

This is no longer supported in .NET



```
var person = new Person("Kevin");  
var privateField = person.GetType().GetField("_aPrivateField",  
                                             BindingFlags.Instance | BindingFlags.NonPublic);  
privateField.SetValue(person, "New private field value");
```

Working Towards Cleaner Code with ReflectionMagic

Reflection-based code can become bloated



```
var person = new Person("Kevin");  
var privateField = person.GetType().GetField("_aPrivateField",  
                                             BindingFlags.Instance | BindingFlags.NonPublic);  
privateField.SetValue(person, "New private field value");
```

Working Towards Cleaner Code with ReflectionMagic

Reflection-based code can become bloated



Working Towards Cleaner Code with ReflectionMagic

ReflectionMagic is a library that helps with writing cleaner code

- Uses a custom `DynamicObject` underneath the covers




```
var person = new Person("Kevin");  
person.AsDynamic()._aPrivateField = "Updated value via ReflectionMagic";
```

Working Towards Cleaner Code with ReflectionMagic

Better developer experience
Cleaner codebase



Demo



**Working towards cleaner code with
ReflectionMagic**



Summary

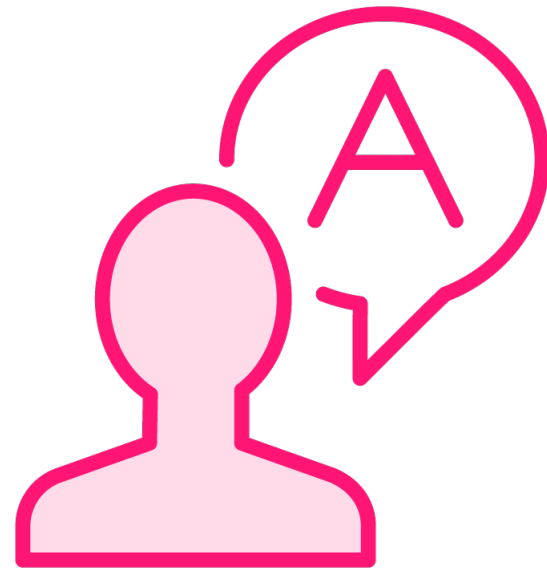


Code Access Security and the reflection-only context don't exist in .NET

ReflectionMagic helps keep your codebase clean



The End is Nigh...



Questions?
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You're ready
to be
AWESOME!

