What's New in C# 9.0

RECORDS AND PROPERTIES



Roland Guijt
MICROSOFT MVP, CONSULTANT, AUTHOR AND SPEAKER
@rolandguijt rolandguijt.com



Module Overview



Preparation

The case for immutability

Init-only setters

Introducing records

Records: constructors, deconstructors and equality

Clone records with the "with" keyword

Adding a record body



What You Need For C# 9

Visual Studio 2019 16.8.2 or higher

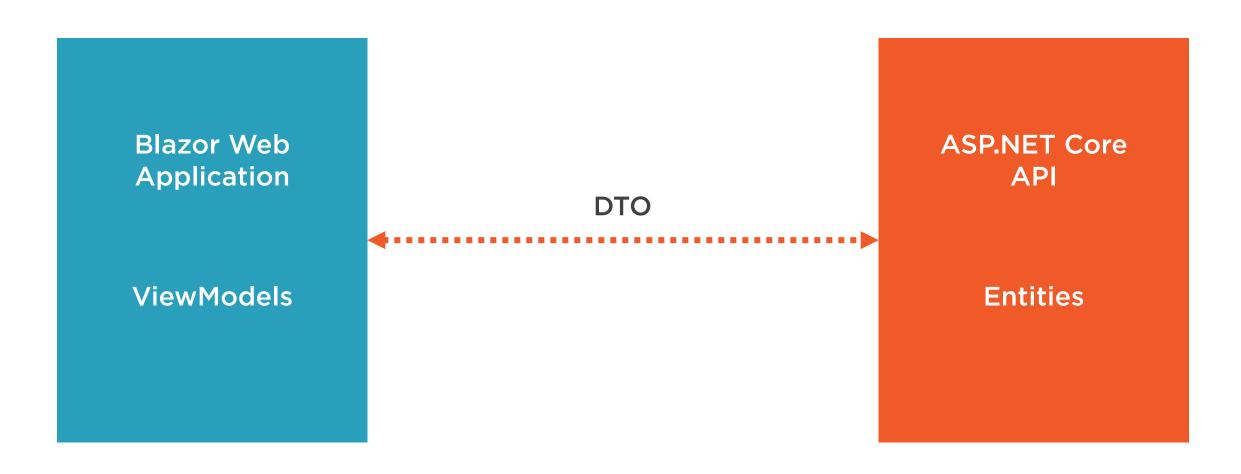
A project targeted at .NET 5 or higher



https://4sh.nl/CSharp9NetStandard



GloboTicket Achitecture





Do the properties of a DTO need to change?



Do the properties of a DTO need to change?

No



Immutability

Objects that shouldn't change shouldn't be changeable

Saves you a headache in a multi-threaded process

C# wasn't very good at immutability



Record

A new reference type
Immutable by design
Saves us from writing boilerplate code
Generated as a class in IL



A record is equal to another record when the property values match AND they are of the same type.



Summary



Immutability prevents trouble Init-only setters

Records

