Visual Studio LIVE!
EXPERT SOLUTIONS FOR ENTERPRISE DEVELOPERS

@ Microsoft HQ

Fast Focus: Safer Code
Nullability and Null Operators in C#

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Level: Introductory / Intermediate

#VSLIVE

Your Code Powers the World.
Our Training Powers You.

What Nullability Is

- A way to get *compile-time* warnings about possible null references.
- A way to make the intent of your code more clear.

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What Nullability Is Not

- NOT a way to prevent null reference exceptions at runtime.
- NOT a way to prevent someone from passing a null to your method.
- NOT a way to prevent someone from assigning a null to an object.

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Enabling Nullability*

- Project Level

```
<Nullable>enable</Nullable>
```

- Code Level

```
#nullable enable
```

* More correctly: enabling non-nullability

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Nullability Operators

`?.` / `?[]` (Null Conditional Operators)

```
tokenSource?.Cancel();
```

`!` (Null Forgiving Operator)

```
task.Exception!.Flatten().InnerExceptions
```

`??` / `??=` (Null Coalescing Operators)

```
return result ?? new List<Person>();
```

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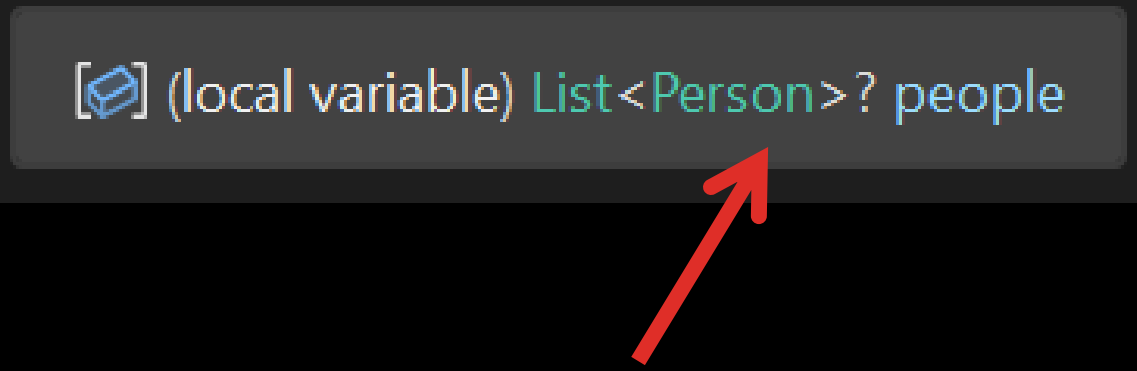
A Note about “var”

- Using “var” results in a nullable type.

```
var people = new List<Person>();
```



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Thank You!

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https://github.com/jeremybytes/vslive2024-microsofthq