Java Interoperability

Kevin Jones

@kevinrjones

Overview

Nulls and Java

SAM interfaces

Annotations

Kotlin and Null

Kotlin has support for nulls

– Type declaration

– Operators

Kotlin Understands Java Annotations

@Nullable, @NotNull

org.jetbrains.annotation

org.eclipse.jdt.annotation

What if there are no annotations?

Kotlin now working with 'Platform' types

Developer has full responsibility

```
val i: Int = person.name

ERROR: Type mismatch: inferred type is String! but Int was
expected
```
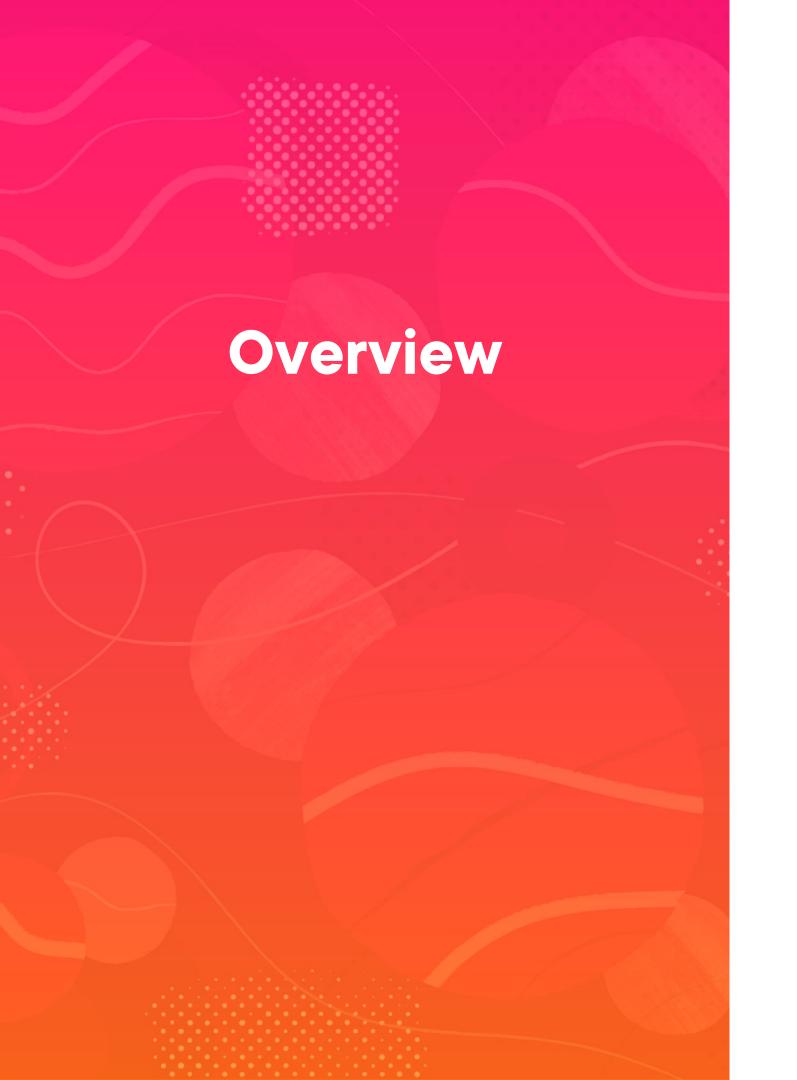
Platform Types Are Hidden

Can see them in error messages

What about overriding Java types?

Can make the parameters Nullable or not

Overview

Nulls and Java

SAM interfaces

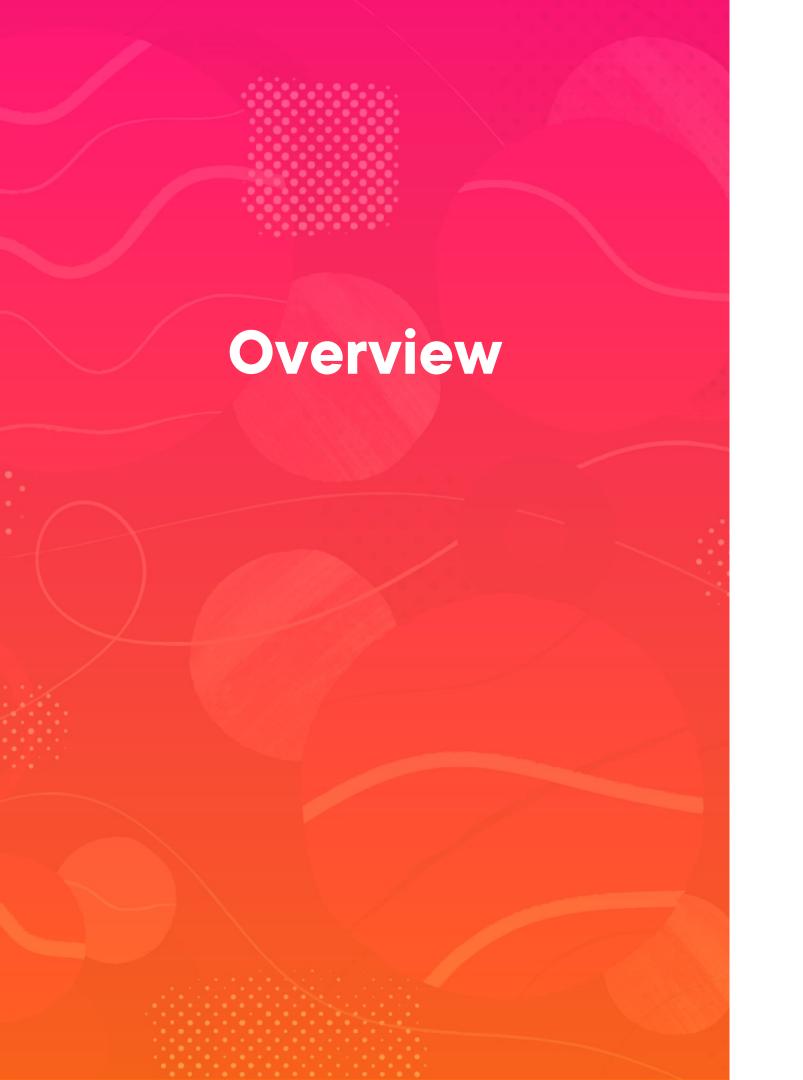Annotations

Passing Lambdas to Java Methods

Many Java methods expect a functional interface

Prior to Java 8 passed an anonymous object

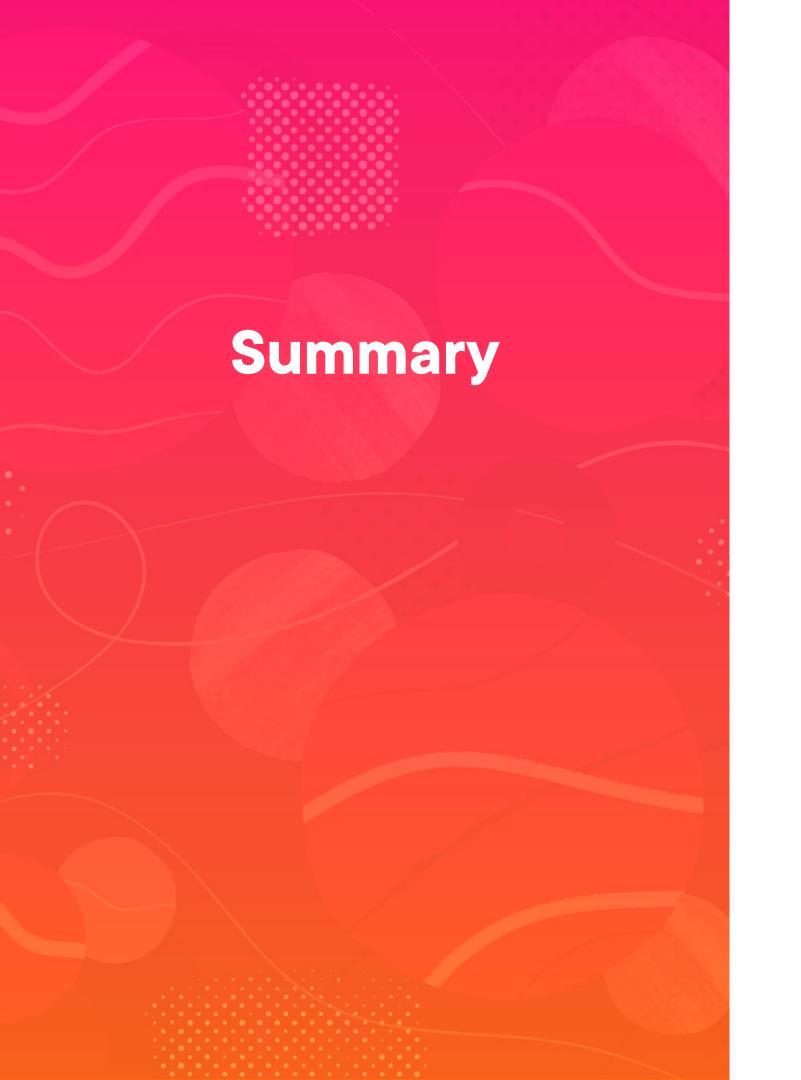Since Java 8 can pass lambdas

Kotlin lambdas are interoperable

Overview

Nulls and Java

SAM interfaces

Annotations

Annotations

@file

@JvmField

@JvmStatic

Summary

Nulls and Java

- @Nullable
- @NotNull
- Platform types

SAM interfaces

- Kotlin interoperates with SAM interfaces

Summary

Annotations

- @file:JvmName
- @JvmField
- @JvmStatic

Summary

Tour of Kotlin

- The language
- Classes and interfaces
- Other class types
- Functions
- Collections and lambdas
- Interoperability