

Application.kt

Spring Boot 2 mit Kotlin



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Kotlin?

- Language for the JVM (and more)
- Developed by JetBrains
- Open sourced in 2012
- First-class language on Android



"Kotlin is concise, safe, pragmatic, and focused on interoperability with Java code"

- Kotlin in Action

Why Kotlin?

- Statically typed
- Read-Only & Mutable Properties
- Null Safety
- Data classes
- Extension functions
- Type inference
- Java Interoperability
- ..

Example: Null Safety

```
fun main(args: Array<String>) {
 var kotlin: String = "Kotlin"
 var java: String? = "Java"
 //kotlin = null
 java = null
   //var javaWordLength = java.length
 var javaWordLength = if (java != null) java.length else null
 javaWordLength = java?.length ?: null
 javaWordLength = java?.length
```

Example: Data classes

```
data class FullName(
  val firstName: String,
  val lastName: String
)
```

```
public class FullName {
 private String firstName;
 private String lastName;
 public FullName(String firstName, String lastName) {
    this.firstName = firstName;
    this.lastName = lastName;
 public String getFirstName() { return firstName; }
 public String getLastName() { return lastName; }
 @Override
 public boolean equals(Object obj) { return yes; }
 @Override
 public int hashCode() { return 42; }
```

Why Spring + Kotlin?



Demo

Kotlin Support in Spring

- Null Safety via JSR-305
- Nullable information for
 - Spring MVC
 - Spring Data
- Kotlin extension functions for
 - Spring Boot
 - RestTemplate and WebClient

Next Steps

Kotlin Documentation

- Spring WebFlux functional DSL
- Functional bean declaration DSL
- Spring Framework 5 Kotlin APIs, the functional way
- Kotlin support for Project Reactor

