Dark
Syntax Sugars



# **Syntax Sugars**

### Single argument methods

• example: apply methods of Try, Option, Future, etc

```
def singleArgMethod(arg: Int): String =
   s"$arg little ducks..."

val description = singleArgMethod {
   // write some complex code
   42
}
```

## Single abstract method pattern

example: Java Runnables

```
trait Action {
  def act(x: Int): Int
}

val aFunkyInstance: Action = (x: Int) => x + 1
```

```
val aTryInstance = Try { // Try.apply
  throw new RuntimeException
}
List(1,2,3).map { x =>
  // code block for the lambda
  x + 1
}
```

# Syntax Sugars

### Methods ending in : are special

example: lists

```
1 :: 2 :: 3 :: List(4, 5)
List(4,5).::(3).::(1) // equivalent
```

### Multi-word identifiers

example: HTTP libraries

```
object `Content-Type` {
  val `application/json` = "application/json"
}
```

# Syntax Sugars

Infix types

```
infix trait -->[A, B]
val towards: Int --> String = ???
```

# Update

• example: arrays

```
val anArray = Array(1,2,3)
anArray(2) = 7 // rewritten to anArray.update(2, 7)
```

#### Mutable fields

```
class Mutable {
  private var internalMember: Int = 0
  def member = internalMember // "getter"
  def member_=(value: Int): Unit =
    internalMember = value // "setter"
}

val aMutableContainer = new Mutable
aMutableContainer.member = 42
```

Scala rocks