# SWIFT ◆?

## BAS BROEK
### @BASTHOMAS

Oops, something wrong here. We'll get into that.

# SWIFT ④

## BAS BROEK

### @BASTHOMAS

That's better. Let's talk about Swift 4.

# EXPECTED RELEASE DATE:
## LATE 2017

So, first things first.

# STAGE 1 & 2

# STAGE 1

Source stability for Swift 3 code

^ ABI stability for the std lib

^ ... but "Reliability of the compiler, better error messages, faster compile times & scaling better to large projects *OVER* ABI for Swift 4"

# STRINGS

We know strings, right?

🤔

# Right?

# NO

Strings will change dramatically in Swift 4

# STRINGS IN SWIFT 4

## RE-EVALUATE THE API[1]

Regex: "In the future, support for regular expression literals in the compiler could allow for compile time syntax checking and optimization." 🎉

# STRINGS IN SWIFT 4

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> **HOW** TO USE INTERNATIONALIZATION API'S CORRECTLY[2]

[1] HTTPS://GITHUB.COM/APPLE/SWIFT/BLOB/MASTER/DOCS/STRINGMANIFESTO.MD

[2] LOCALIZATION & INTERNATIONALIZATION ITSELF ARE PLANNED FOR SWIFT 5

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> > > SUPPORTING `Range` **IN FAVOR OF** `NSRange`
> > > IMPROVED STRING **INTERPOLATION & FORMATTING**

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> > ~~REGEX~~

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# WHAT ABOUT SOURCE STABILITY?

# SE-0141[3] TO THE RESCUE

```swift
@available(swift 4, *)
extension Collection {
  func index(offset: IndexDistance) -> Index {
    return index(startIndex, offsetBy: offset)
  }
  func offset(of i: Index) -> IndexDistance {
    return distance(from: startIndex, to: i)
  }
}
```

[3] HTTPS://GITHUB.COM/APPLE/SWIFT-EVOLUTION/BLOB/MASTER/PROPOSALS/0141-AVAILABLE-BY-SWIFT-VERSION.MD

# STAGE 2
## "SOME TIME IN SPRING 2017"

... so that's between the end of March and end of June.

# SWIFT-EVOLUTION[4]

Pretty much the resource for Stage 2.

^ Has some awesome filtering options as well.

# WHAT IS UPON US?[5]

[5] HTTPS://GITHUB.COM/APPLE/SWIFT-EVOLUTION/PULLS?
UTF8=✓&Q=LABEL%3A%22OUT%20OF%20SCOPE%20FOR%20CURRENT%20RELEASE%22

In no particular order

# WHAT IS UPON US?[5]

> **ENFORCE CALLING SUPER**

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> MUCH MORE ONCE STAGE 2 STARTS...

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In no particular order

# AND OF COURSE...

[6] HTTPS://LISTS.SWIFT.ORG/PIPERMAIL/SWIFT-EVOLUTION-ANNOUNCE/2017-JANUARY/000307.HTML

[7] HTTPS://GITHUB.COM/SWIFT-SERVER

Introduce Swift Weekly Brief @ "???"

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Introduce Swift Weekly Brief @ "???"

# WORLD
# DOMINATION

And as Chris Lattner said in the ATP podcast...
"Obviously, I care a lot about Swift and I really want it to get to its goal of world domination."
He said it more casually, though

# @BASTHOMAS
# @SWIFTLYBRIEF[8]