

Adding Generics to Java

Principals of Programing Languages

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# WHAT ARE GENERICS?

- ▶ Generics are a type or method to operate on objects of various types while providing compile-time type safety
- ▶ They can be any of the following
  - ▶ Type Variables
  - ▶ Class
  - ▶ Interface
  - ▶ Method
  - ▶ Constructors

# WHAT MADE US TRY TO IMPLEMENT THEM?

# OTHER MOTIVATIONS

## WHAT WAS THE APROXIMATE TIMELINE OF THEIR CREATION?

On May 11, 1999 the Java Specification Request of adding generic types to the Java Programming Language was approved. Years later the Final Release was published. This was on September 30, 2004 but the main community arguments happened between the two dates. From the 18th of May 1999 until August 1, 2001 the public had the opportunity to review and create the implementation.

# TYPE WILDCARDS

# TYPE ERASURE

# INHERITANCE AND SUBTYPES



# ADVANTAGE: TYPE SAFETY

# DISADVANTAGE: OVER COMPLICATION

# ADVANTAGE

# DISADVANTAGE

# ADVANTAGE

# DISADVANTAGE

# SLIDE 15

# SLIDE 16



# SLIDE 17

# SLIDE 18

# SLIDE 19

# ANY QUESTIONS?

Thanks!

# OTHER NOTES

to make this, run this:

```
./generate genericsPresentation.md
```

to run the pdf with 5 min timer:

```
pdf_presenter_console genericsPresentation.pdf --duration=5
```