Using Primitive Wrappers

The Conversion Methods



Richard Monson-Haefel

Sr. Software Engineer

www.monsonhaefel.com

Overview

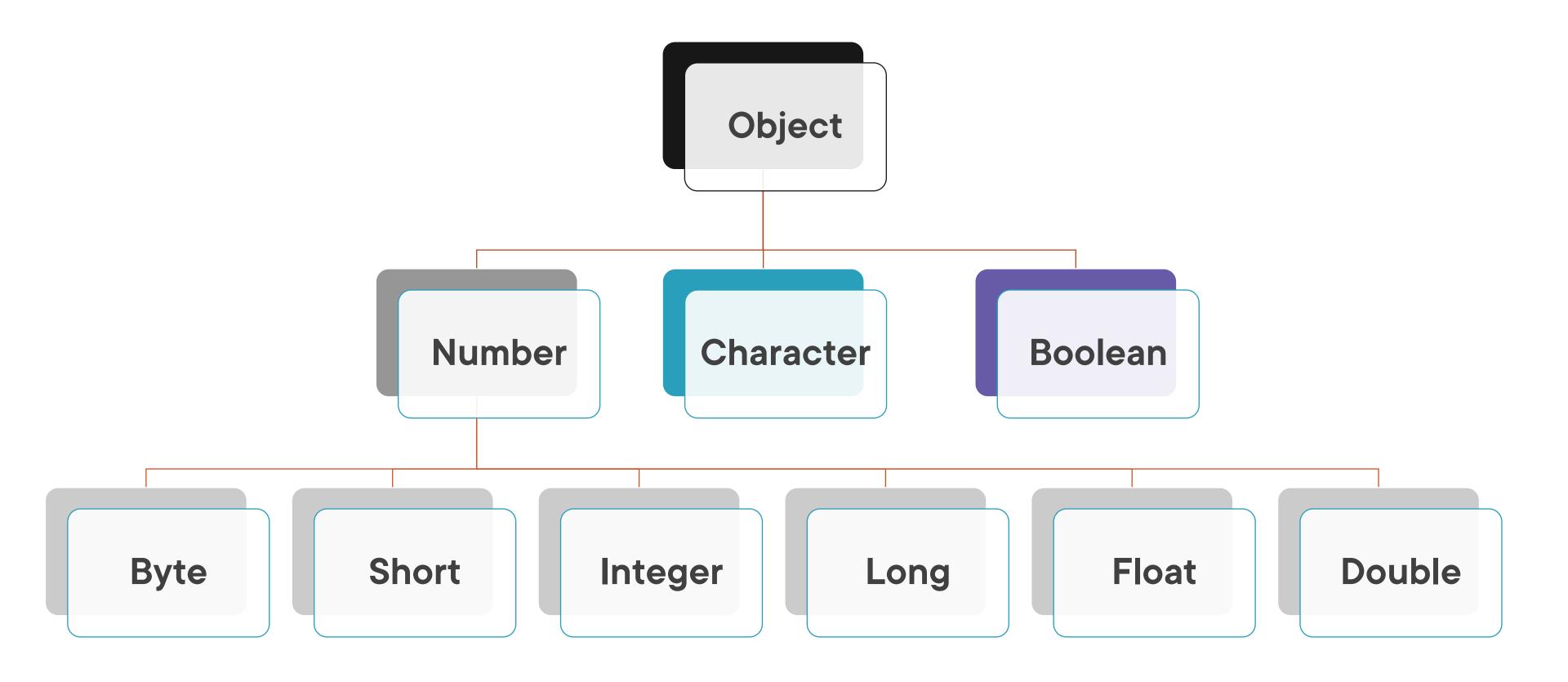


- Wrapper Classes
 - Conversion methods
- Autoboxing and Unboxing
- Custom Wrappers

Primitive Wrappers

Primitive Type	Wrapper Class
boolean	java.lang.Boolean
byte	java.lang.Byte
short	java.lang.Short
int	java.lang.Integer
long	java.lang.Long
float	java.lang.Float
double	java.lang.Double
char	java.lang.Character

Number Class Diagram



Autoboxing and Unboxing

java.lang.Integer

(simplified source code)

Integer.java

```
package java.lang;
public final class Integer extends Number implements
Comparable<Integer> {
     private final int value;
     public Integer(int value) {
           this.value = value;
     public static Integer valueOf(int i) { ... }
     public static int parseInt(String s) throws
NumberFormatException { ... }
     public String toString() { ... }
     public byte byteValue() { ... }
```

Custom Wrappers

Wrapper Class
Idioms

Class is final

Instances are immutable

There is a range of values

Read, not write

Includes equals, hashcode, and toString

Helper methods

Serializable and Comparable

Summary



- Primitive types corresponding wrappers
- Conversion methods
- Boolean and Character do not support conversion methods
- Autoboxing and unboxing
- Custom wrapper idioms

Up Next:

Understanding Variable Rules and Scope