Java Fundamentals: HttpClient

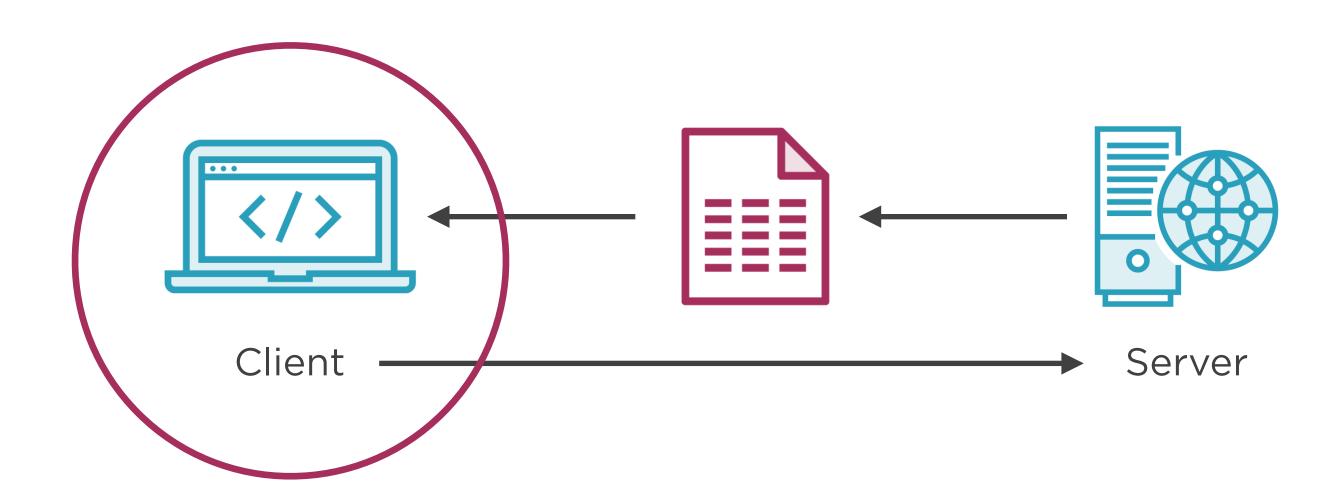
INTRODUCING HTTPCLIENT



Sander Mak
FELLOW & SOFTWARE ARCHITECT

@Sander_Mak

Java and HTTP



Course Overview

Introducing HttpClient

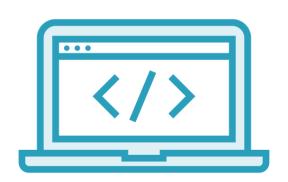
Performing Your First HTTP Requests

Using HttpClient

Security

Exploring Advanced HttpClient Features

HttpClient



Introduced in Java 11

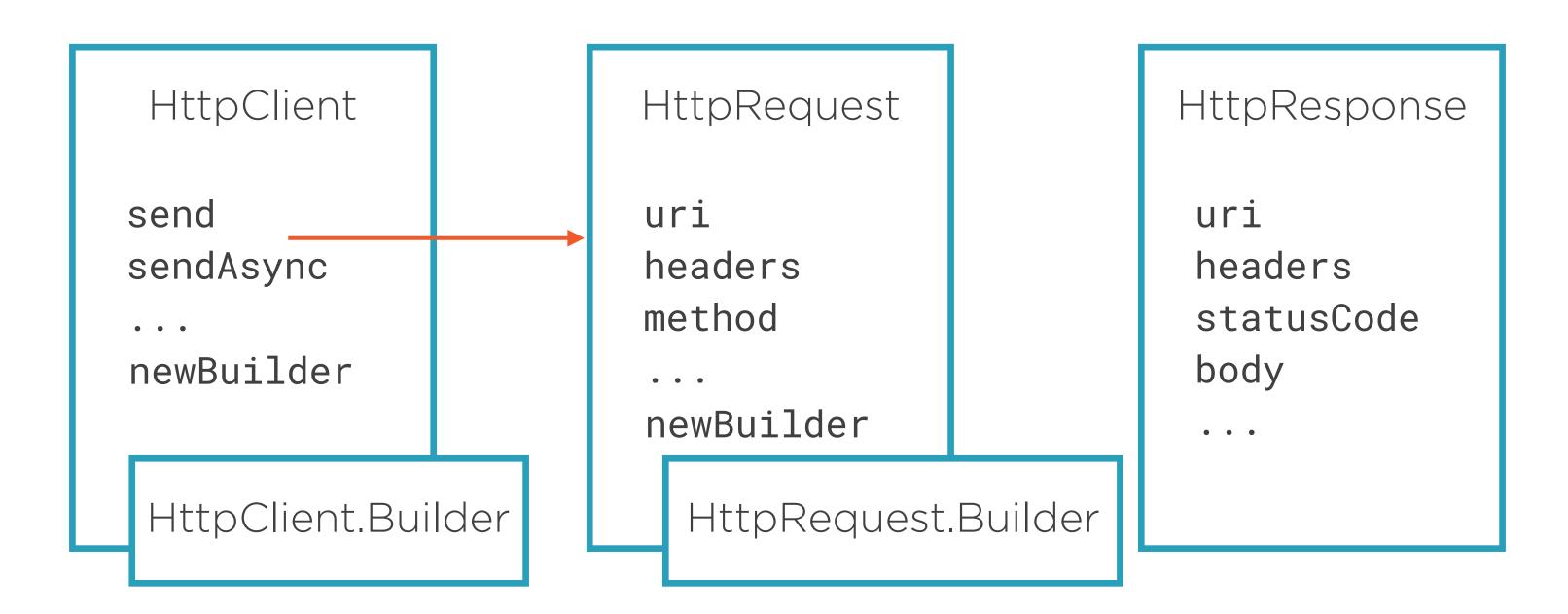
Replaces HttpURLConnection API

Supports HTTP/2, WebSocket

Sync & async methods

Goal: easy to use in common cases, powerful enough for complex ones

HttpClient: Important Types



java.net.http

HttpClient: Quick Example



What's Wrong with HttpURLConnection?



Designed around HTTP/1.1 timeframe

Before: Generics, Enums, Lambdas

What's Wrong with HttpURLConnection?

```
try {
                       URL url = new URL("https://pluralsight.com");
awkward cast
                       HttpURLConnection con = (HttpURLConnection) url.openConnection();
                       con.setRequestMethod("GET");
no enums
                       con.setRequestProperty("User-Agent", "Java 1.1");
                       if(con.getResponseCode() == 200) {
low-level
                          System.out.println(readInputStream(con.getInputStream())); }
                       else {
                          System.out.println("Something wrong there!"); }
                      catch (IOException e) {
                        System.out.println("Something wrong here!");
```

Before Java 11



Nobody should use HttpURLConnection in new code

Apache HttpComponents Square's OkHttp

JAX-RS REST Client