```kotlin
val client: HttpHandler = ApacheClient()

val response: Response = client(
    Request(GET, "https://www.http4k.org/search")
        .query("term", "http4k is cool")
)
```

Apache

OkHttp3

HTTP Clients

"It turns an HTTP Request into an HTTP Response"

ie. it's an HttpHandler!

`HttpHandler: (Request) -> Response`

```
val client: HttpHandler = ApacheClient()

val response: Response = client(
    Request(GET, "https://www.http4k.org/search")
        .query("term", "http4k is cool")
)
```

Typesafe HTTP Contracts

```kotlin
val miner: HttpHandler = routes(
    "/mine/{btc}" bind POST to { r: Request ->
        val newTotal: Int = r.path("btc")!!.toInt() + 1
        val out = "You have $newTotal BTC"
        val json = """{ "value": "$out"}"""
        Response(OK).body(json)
    }
)
```