Building a REST API with Annotated Controllers

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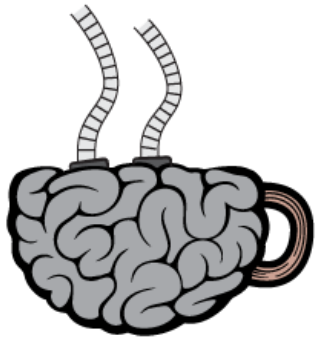


WIRED BRAIN

COFFEE

Product Catalog

- Get all products
- Get a specific product
- Register a new product
- Update a product
- Delete a product
- Delete all products
- Events

Overview

Spring WebFlux annotated controllers

Setting up the project with Spring Boot

Reactive Spring Data with MongoDB

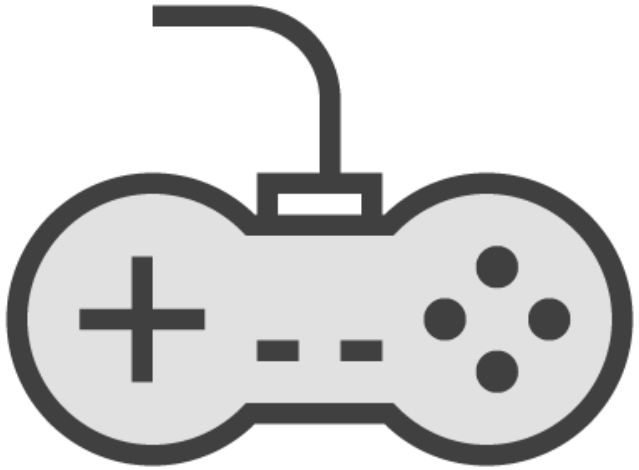
Initializing the embedded database

Building the controller

Server-side events

Annotated Controllers

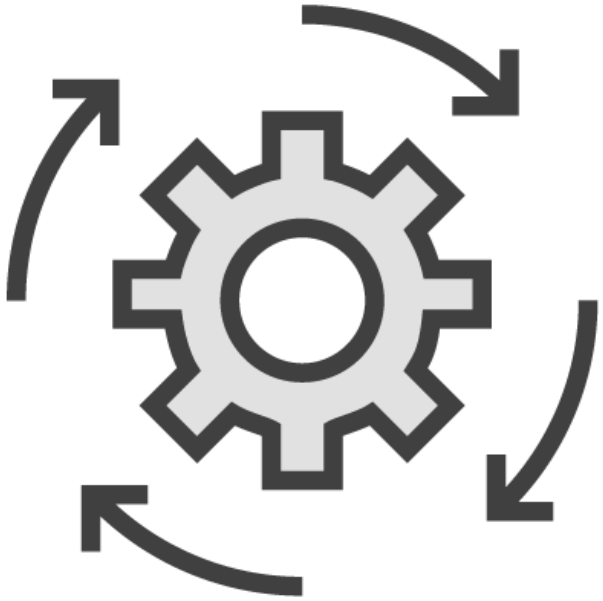
Controllers



@Controller

@RestController

Request Mapping



@GetMapping

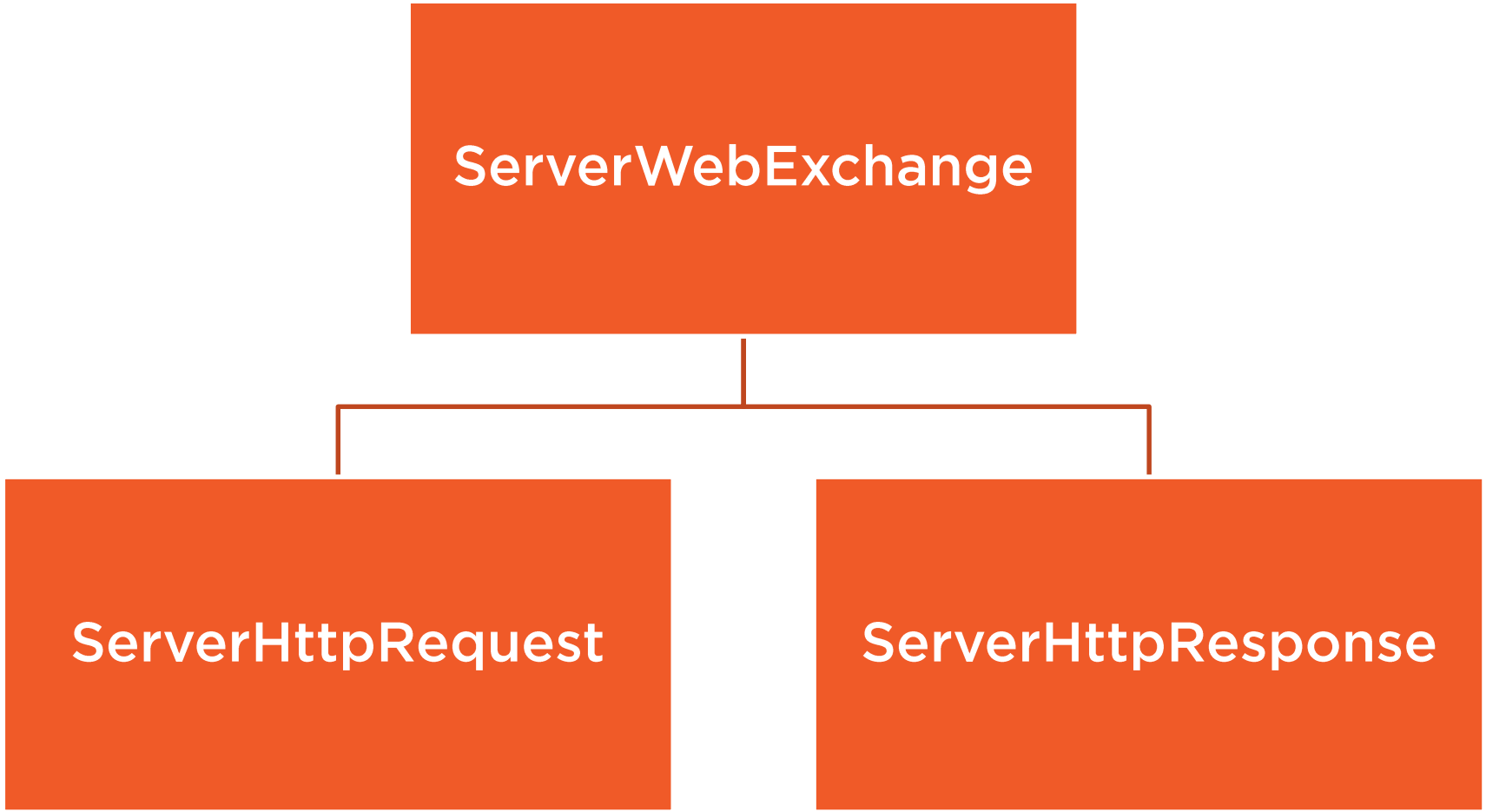
@PostMapping

@PutMapping

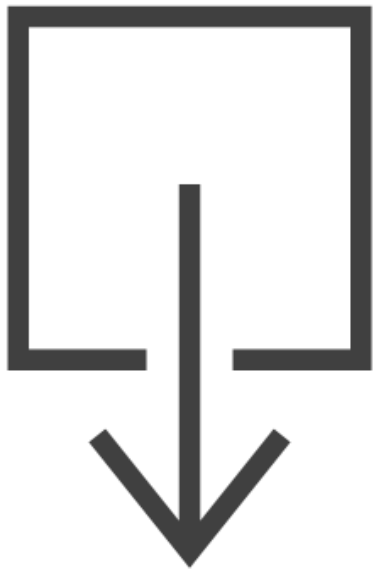
@DeleteMapping

@PatchMapping

Reactive Request and Response



Method Arguments with Reactive Support



WebSession

java.security.Principal

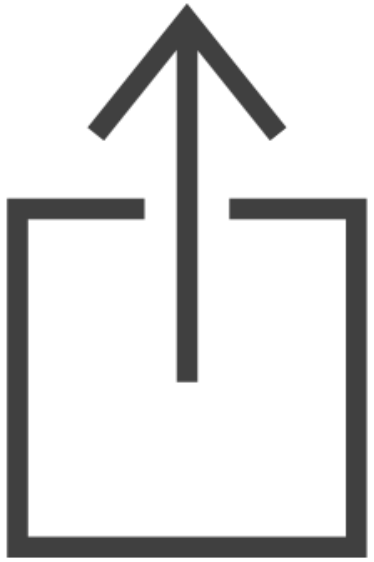
@RequestBody

HttpEntity

@RequestPart

Reactive types are supported for all return values.

Return Values



ResponseEntity

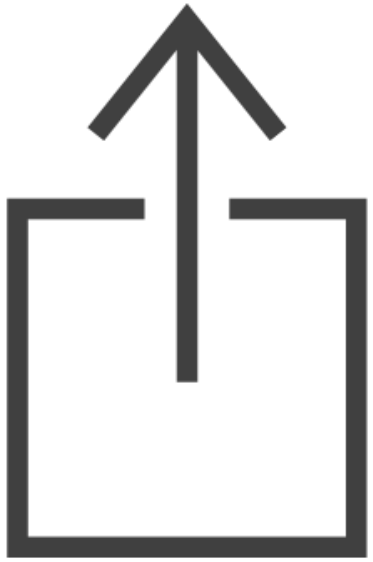
Object

ServerSentEvent

String

- @RestController
  - Mono<String>
- @Controller
  - View name

Return Values



void, Mono<Void>, or returning null

- Response handled
  - ServerHttpResponse
  - ServerWebExchange
  - @ResponseStatus
- @RestController
  - No response body
- @Controller
  - Default view name

Things to Remember

REST API with annotations

- Create
- Read
- Update
- Delete
- Server-side Events

Similar to Spring MVC

Non-blocking/asynchronous model

- Easier to scale

Spring Boot

Reactive Spring Data