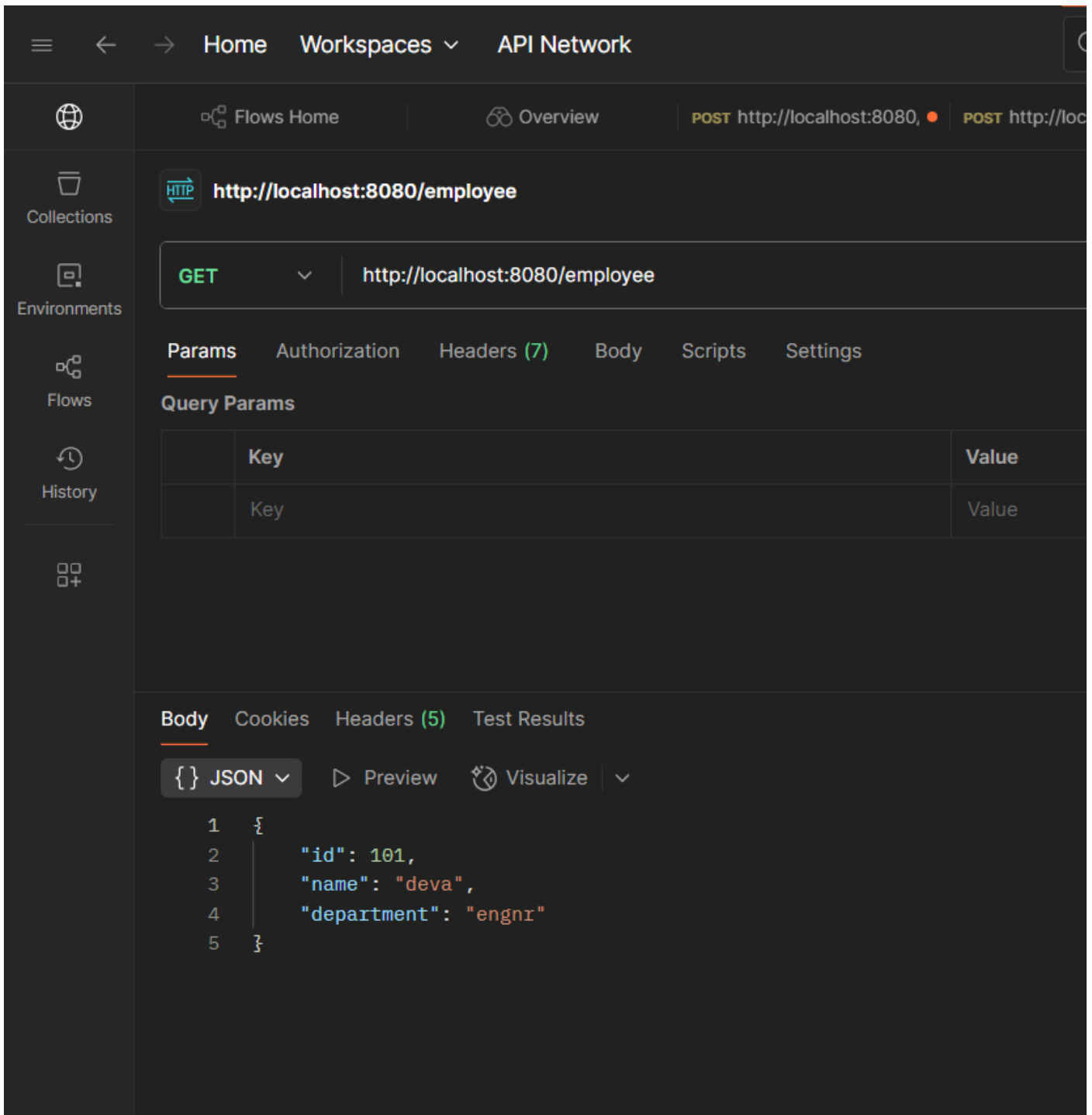


1. Case Study Title: Employee Info API using Spring Boot AutoConfiguration

Objective: To build a simple Spring Boot application that exposes an API endpoint to retrieve basic employee information using Spring Boot AutoConfiguration. The endpoint will be tested via a browser and Postman using only @GetMapping.



2. Spring Boot – Actuators

Case Study: Monitoring an Inventory System Problem Statement: You deploy an Inventory Management app and want to monitor its health, memory usage, bean loading, and environment settings without building these endpoints manually.

HTTP

http://localhost:8080/actuator/health

GET

http://localhost:8080/actuator/health

ParamsAuthHeaders (7)BodyScriptsSettings

Query Params

	Key	Value	Description
	Key	Value	Description

Body

JSON

```
1 {
2   "status": "UP"
3 }
```

HTTP

http://localhost:8080/actuator/beans

GET

http://localhost:8080/actuator/beans

ParamsAuthHeaders (7)BodyScriptsSettings

Query Params

	Key	Value	Description
	Key	Value	Description

Body

200 OK • 446 ms • 106.4

JSON

PreviewVisualize

```
1 {
2   "contexts": {
3     "inventory-monitor": {
4       "beans": {
5         "endpointCachingOperationInvokerAdvisor": {
6           "aliases": [],
7           "scope": "singleton",
8           "type": "org.springframework.boot.actuate.endpoint.
9             cache.CachingOperationInvokerAdvisor",
10          "resource": "class path resource [org/springframew
11            actuate/autoconfigure/endpoint/EndpointAutoConf
12            class]",
13          "dependencies": [
14            "org.springframework.boot.actuate.autoconfigure
15              EndpointAutoConfiguration",
16            "environment"
17          ]
18        }
19      }
20    }
21  }
```

HTTP

http://localhost:8080/actuator/metrics

GET

http://localhost:8080/actuator/metrics

ParamsAuthHeaders (7)BodyScriptsSettings

Query Params

	Key	Value	Description
	Key	Value	Description

Body

200 OK • 20 ms • 1.2

JSON

PreviewVisualize

```
1 {
2   "names": [
3     "application.ready.time",
4     "application.started.time",
5     "disk.free",
6     "disk.total",
7     "executor.active",
8     "executor.completed",
9     "executor.pool.core",
10    "executor.pool.max",
11    "executor.pool.size",
12    "executor.queue.remaining",
13    "executor.queued",
14    "..."
15  ]
16 }
```

HTTP

http://localhost:8080/actuator/env

GET

http://localhost:8080/actuator/env

ParamsAuthHeaders (7)BodyScriptsSettings

Query Params

	Key	Value
	Key	Value

Body

JSON

PreviewVisualize

```
1 {
2   "activeProfiles": [],
3   "defaultProfiles": [
4     "default"
5   ],
6   "propertySources": [
7     {
8       "name": "server.ports",
9       "properties": {
10         "local.server.port": {
11           "value": "*****"
12         }
13       }
14     }
15   ]
16 }
```