

**UNIT 2**

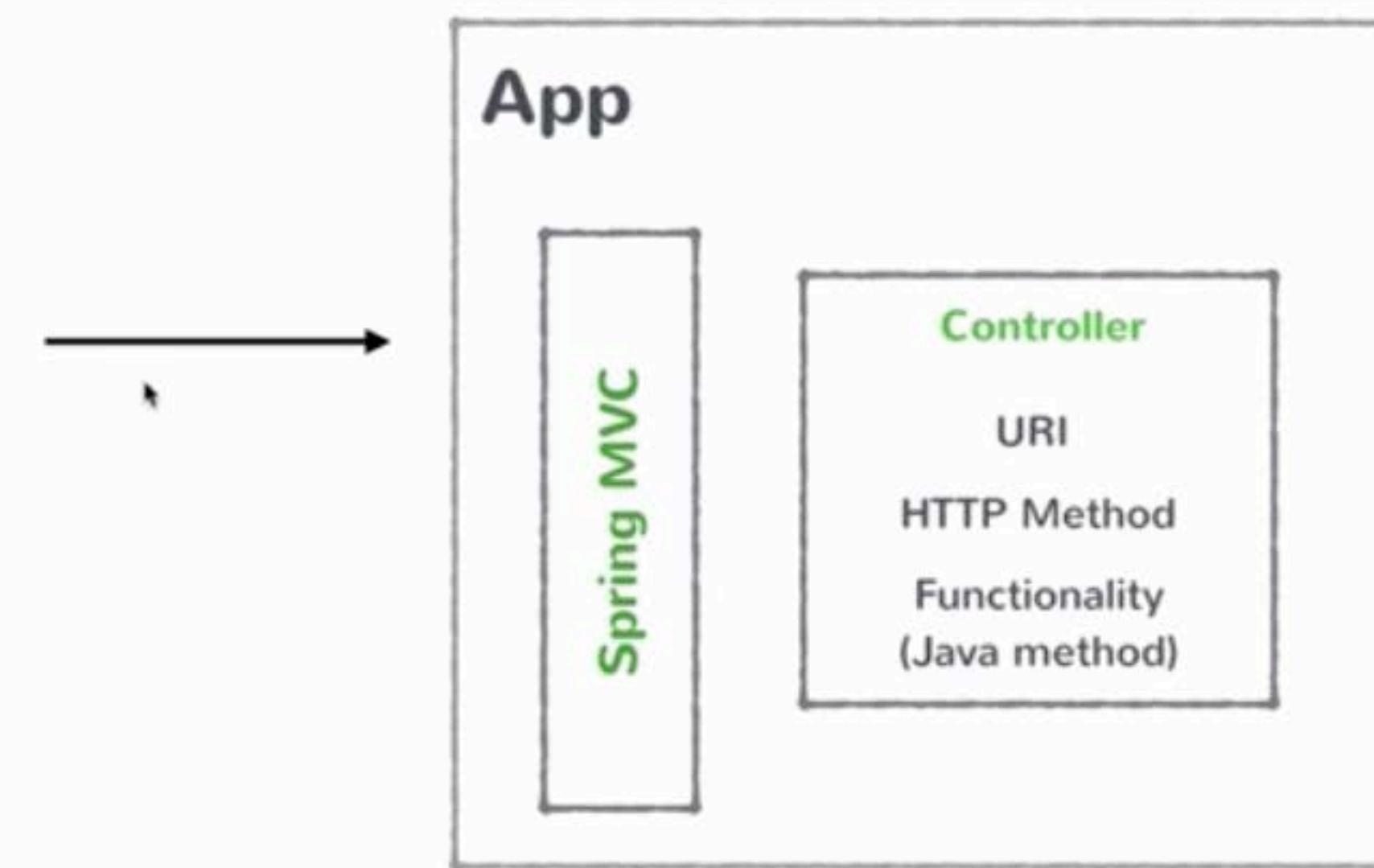
# Spring MVC: The View Tier

---

## Spring Boot Quick Start

Java Brains

# Spring MVC Controller



# Course API

**Resources:**

Topic, Course, Lesson



A Topic can have multiple Courses and a Course can consist of multiple Lessons.

# Course API

## Topics:

<b>GET</b>	/topics	Gets all topics
<b>GET</b>	/topics/{id}	Gets the topic
<b>POST</b>	/topics	Create new topic
<b>PUT</b>	/topics/{id}	Updates the topic
<b>DELETE</b>	/topics/{id}	Deletes the topic

Package Explorer      TopicController.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return Arrays.asList(
            new Topic("spring", "Spring Framework", "Spring Framework Description"),
            new Topic("java", "Core Java", "Core Java Description"),
            new Topic("javascript", "JavaScript", "JavaScript Description")
        );
    }
}
```

Servers      Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable      Smart Insert      12 : 31

Package Explorer    TopicController.java

course-api [boot]  
src/main/java  
  io.javabrains.springbootstarter  
  io.javabrains.springbootstarter.hello  
  io.javabrains.springbootstarter.topic  
    Topic.java  
    TopicController.java

src/main/resources  
src/test/java  
src/test/resources  
JRE System Library [JavaSE-1.8]  
Maven Dependencies  
src  
target  
pom.xml

Servers

TopicController.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
```

New ▶

- Spring Starter Project
- Import Spring Getting Started Content
- Spring Project
- Java Project
- Static Web Project
- Dynamic Web Project
- Maven Project
- Project...
- Aspect
- Package
- Class**
- Interface
- Enum
- Annotation
- JUnit Test Case
- Source Folder
- Java Working Set
- Spring Bean Configuration File
- Spring Web Flow Definition File
- Folder
- File
- Untitled Text File
- Example...
- Other...

Go Into

Open in New Window F4

Show In ▶ NEW ▶

Copy ⌘C

Copy Qualified Name ⌘V

Paste ⌘V

Delete ⌘N

Remove from Context ⌘D

Build Path ▶

Source ⌘S ▶

Refactor ⌘T ▶

Import... ▶

Export... ▶

References ▶

Declarations ▶

Refresh F5

Assign Working Sets...

Run As ▶

Debug As ▶

Profile As ▶

Validate ▶

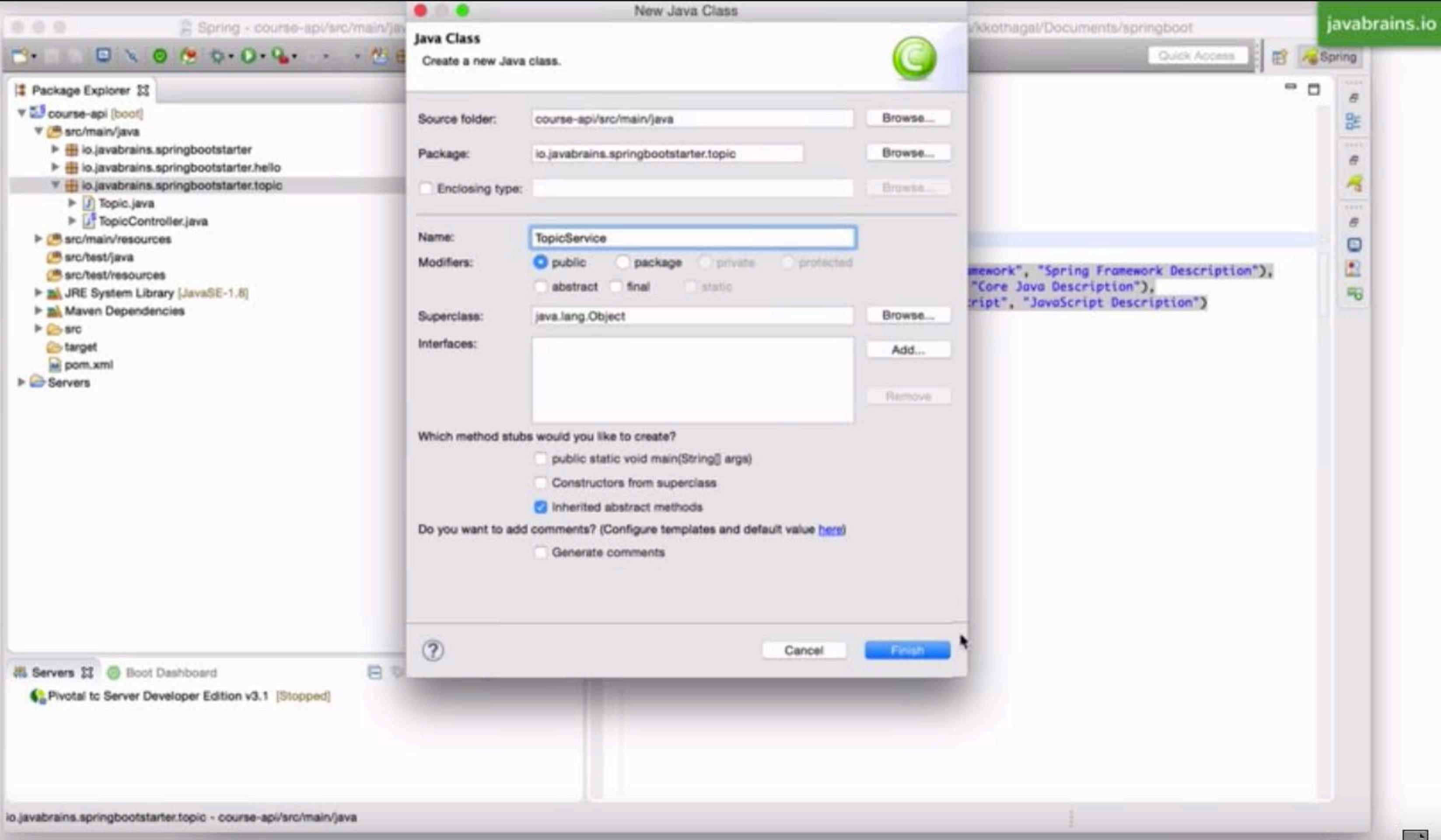
Restore from Local History...

Team ▶

Compare With ▶

GitHub ▶

Properties ▶



Package Explorer    TopicController.java    TopicService.java

course-api [boot]  
src/main/java  
  io.javabrainsspringbootstarter  
  io.javabrainsspringbootstarter.hello  
  io.javabrainsspringbootstarter.topic  
    Topic.java  
    TopicController.java  
    TopicService.java  
src/main/resources  
src/test/java  
src/test/resources  
JRE System Library [JavaSE-1.8]  
Maven Dependencies  
src  
  target  
  pom.xml  
Servers

TopicService.java

Service cannot be resolved to a type

4 quick fixes available:

- Import 'Service' from 'org.springframework.stereotype'
- Create annotation 'Service'
- Change to 'ServiceMode' (jaxws.ws)
- Fix project setup...

Press 'F2' for focus

Servers    Boot Dashboard

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Service cannot be resolved to a type

Writable    Smart Insert    3 : 3

Package Explorer    TopicController.java    TopicService.java

```
package io.javabrainsspringbootstarter.topic;

import org.springframework.stereotype.Service;

@Service
public class TopicService {
```

src/main/java  
io.javabrainsspringbootstarter  
io.javabrainsspringbootstarter.hello  
io.javabrainsspringbootstarter.topic  
Topic.java  
TopicController.java  
TopicService.java

src/main/resources  
src/test/java  
src/test/resources  
JRE System Library [JavaSE-1.8]  
Maven Dependencies  
src  
target  
pom.xml

Servers

Servers    Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable    Smart Insert    6 : 21

Package Explorer    TopicController.java    TopicService.java

```
course-api [boot]
  src/main/java
    io.javabrainsspringbootstarter
    io.javabrainsspringbootstarter.hello
    io.javabrainsspringbootstarter.topic
      Topic.java
      TopicController.java
      TopicService.java
  src/main/resources
  src/test/java
  src/test/resources
  JRE System Library [JavaSE-1.8]
  Maven Dependencies
  src
  target
  pom.xml
```

TopicController.java

```
package io.javabrainsspringbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    TopicService topicService;

    public String getAllTopics() {
        return "List of Topics";
    }

    public String getTopic(String id) {
        return "Topic details";
    }

    public String addTopic(Topic topic) {
        return "Topic added";
    }

    public String updateTopic(Topic topic) {
        return "Topic updated";
    }

    public String deleteTopic(String id) {
        return "Topic deleted";
    }
}
```

TopicService.java

```
package io.javabrainsspringbootstarter.topic;

import java.util.ArrayList;
import java.util.Arrays;
import java.util.List;

public class TopicService {

    private List<Topic> topics = new ArrayList<>(Arrays.asList(
            new Topic("1", "Spring Boot", "Spring Boot is a framework for Java applications"),
            new Topic("2", "Java", "Java is a programming language and computing platform")
    ));

    public List<Topic> getAllTopics() {
        return topics;
    }

    public Topic getTopic(String id) {
        return topics.stream().filter(topic -> topic.getId().equals(id)).findFirst().get();
    }

    public Topic addTopic(Topic topic) {
        topics.add(topic);
        return topic;
    }

    public Topic updateTopic(Topic topic) {
        topics.set(0, topic);
        return topic;
    }

    public void deleteTopic(String id) {
        topics.removeIf(topic -> topic.getId().equals(id));
    }
}
```

Servers    Boot Dashboard

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The screenshot shows the Spring Tool Suite interface with the following details:

- Package Explorer:** Shows the project structure under "course-api".
  - src/main/java:** Contains "io.javabrains.springbootstarter", "io.javabrains.springbootstarter.hello", and "io.javabrains.springbootstarter.topic".
    - "Topic.java" is selected.
    - "TopicController.java" and "TopicService.java" are also listed.
  - src/main/resources**
  - src/test/java**
  - src/test/resources**
  - JRE System Library [JavaSE-1.8]**
  - Maven Dependencies**
  - src**
  - target**
  - pom.xml**- Servers:** Shows "Pivotal tc Server Developer Edition v3.1 [Stopped]".
- TopicController.java:** The active file, containing the following code:

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return Arrays.asList(
            new Topic("spring", "Spring Framework", "Spring Framework Description"),
            new Topic("java", "Core Java", "Core Java Description"),
            new Topic("javascript", "JavaScript", "JavaScript Description")
        );
    }
}
```
- TopicService.java:** A file listed in the Package Explorer but not currently open in the editor.

Package Explorer    TopicController.java    TopicService.java

```
package io.javabrains.springbootstarter.topic;

import org.springframework.stereotype.Service;
@Service
public class TopicService {
```

src/main/java  
io.javabrains.springbootstarter  
io.javabrains.springbootstarter.hello  
io.javabrains.springbootstarter.topic  
Topic.java  
TopicController.java  
TopicService.java

src/main/resources  
src/test/java  
src/test/resources  
JRE System Library [JavaSE-1.8]  
Maven Dependencies  
src  
target  
pom.xml

Servers

Servers    Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

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Package Explorer    TopicController.java    TopicService.java

```
package io.javabrainsspringbootstarter.topic;

import java.util.Arrays;
import java.util.List;

import org.springframework.stereotype.Service;

@Service
public class TopicService {

    private List<Topic> topics = Arrays.asList(
        new Topic("spring", "Spring Framework", "Spring Framework Description"),
        new Topic("java", "Core Java", "Core Java Description"),
        new Topic("javascript", "JavaScript", "JavaScript Description")
    );

}
```

Servers    Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

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Package Explorer    TopicController.java    TopicService.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;
import java.util.List;

import org.springframework.stereotype.Service;

@Service
public class TopicService {

    private List<Topic> topics = Arrays.asList(
        new Topic("spring", "Spring Framework", "Spring Framework Description"),
        new Topic("java", "Core Java", "Core Java Description"),
        new Topic("javascript", "JavaScript", "JavaScript Description")
    );

    public List<Topic> getAllTopics() {
        return topics;
    }

}
```

Servers    Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable    Smart Insert    11:31

Package Explorer      TopicController.java      Console      Markers      Progress

course-api [boot]  
src/main/java  
  io.javabrains.springbootstarter  
  io.javabrains.springbootstarter.hello  
  io.javabrains.springbootstarter.topic  
    Topic.java  
    TopicController.java  
    TopicService.java

src/main/resources  
src/test/java  
src/test/resources  
JRE System Library [JavaSE-1.8]  
Maven Dependencies  
src  
target  
pom.xml

Servers      Boot Dashboard

```
package io.javabrains.springbootstarter.topic;

import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

@Service
public class TopicService {
    private List<Topic> topics;

    @Autowired
    public TopicService(List<Topic> topics) {
        this.topics = topics;
    }

    public List<Topic> getAllTopics() {
        return topics;
    }
}
```

2016-12-27 15:26:13.581 - INFO 39140 --- [main] i.j.springbootstarter.CourseApiApp : Starting CourseApiApp on iMac.local with PID 39140...  
2016-12-27 15:26:13.584 - INFO 39140 --- [main] i.j.springbootstarter.CourseApiApp : The following profiles are active: dev  
2016-12-27 15:26:13.650 - INFO 39140 --- [main] s.b.c.e.TomcatEmbeddedServletContainerInitializer : Tomcat initialized with port(s): 8080 (http)  
2016-12-27 15:26:14.913 - INFO 39140 --- [main] o.apache.catalina.core.StandardEngine : Starting Servlet Engine: Apache Tomcat/8.0.33  
2016-12-27 15:26:14.927 - INFO 39140 --- [main] o.apache.catalina.core.StandardService : Starting service [Tomcat]  
2016-12-27 15:26:14.928 - INFO 39140 --- [main] o.apache.catalina.core.StandardEngine : Starting Servlet Container Engine: Apache Tomcat/8.0.33

localhost

```
{"id": "spring", "name": "Spring Framework", "description": "Spring Framework Description"}, {"id": "java", "name": "Core Java", "description": "Core Java Description"}, {"id": "javascript", "name": "JavaScript", "description": "JavaScript Description"}
```

Package Explorer

course-api [boot]

- src/main/java
- io.javabrains
- io.javabrains
- io.javabrains
- Topic.java
- TopicCont
- TopicServ
- src/main/resource
- src/test/java
- src/test/resource
- JRE System Lib
- Maven Depend
- src
- target
- pom.xml

Servers

Servers

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## Package Explorer

course-api [boot]  
src/main/java  
io.javabrains.springbootstarter  
io.javabrains.springbootstarter.hello  
io.javabrains.springbootstarter.topic  
Topic.java  
TopicController.java  
TopicService.java  
src/main/resources  
src/test/java  
src/test/resources  
JRE System Library [JavaSE-1.8]  
Maven Dependencies  
src  
target  
pom.xml  
Servers

## TopicController.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    public Topic getTopic(String id) {
    }

}
```

## Servers

Pivotal tc Server Developer Edition v3.1 [Stopped]

## Package Explorer

course-api [boot]  
src/main/java  
io.javabrains.springbootstarter  
io.javabrains.springbootstarter.hello  
io.javabrains.springbootstarter.topic  
Topic.java  
TopicController.java  
TopicService.java  
src/main/resources  
src/test/java  
src/test/resources  
JRE System Library [JavaSE-1.8]  
Maven Dependencies  
src  
target  
pom.xml  
Servers

## Servers

Pivotal tc Server Developer Edition v3.1 [Stopped]

## TopicController.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService
    }
}
```

PathVariable cannot be resolved to a type

3 quick fixes available:

- Import 'PathVariable' [org.springframework.web.bind.annotation]
- Create annotation 'PathVariable'
- Fix project setup...

Press 'F2' for focus

## Package Explorer

course-api [boot]  
src/main/java  
io.javabrains.springbootstarter  
io.javabrains.springbootstarter.hello  
io.javabrains.springbootstarter.topic  
Topic.java  
TopicController.java  
TopicService.java  
src/main/resources  
src/test/java  
src/test/resources  
JRE System Library [JavaSE-1.8]  
Maven Dependencies  
src  
target  
pom.xml  
Servers

## TopicController.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }
}
```

## Servers

Pivotal tc Server Developer Edition v3.1 [Stopped]

## Package Explorer

course-api [boot]  
src/main/java  
io.javabrains.  
io.javabrains.  
io.javabrains.  
Topic.java  
TopicCont.  
TopicServ.  
src/main/resource  
src/test/java  
src/test/resource  
JRE System Lib.  
Maven Dependenc.  
src  
target  
pom.xml  
Servers

{"id": "spring", "name": "Spring Framework", "description": "Spring Framework Description"}

localhost



Servers

Boot

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## Package Explorer

course-api [boot]  
src/main/java  
io.javabrains.springbootstarter  
io.javabrains.springbootstarter.hello  
io.javabrains.springbootstarter.topic  
Topic.java  
TopicController.java  
TopicService.java  
src/main/resources  
src/test/java  
src/test/resources  
JRE System Library [JavaSE-1.8]  
Maven Dependencies  
src  
target  
pom.xml  
Servers

## TopicController.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }
}
```

## Servers

Pivotal tc Server Developer Edition v3.1 [Stopped]

Package Explorer     TopicController.java     TopicService.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping()
    public void addT consumes : String[] - RequestMapping
                    headers : String[] - RequestMapping
method : RequestMethod[] - RequestMapping selected
                    name : String - RequestMapping
                    params : String[] - RequestMapping
                    path : String[] - RequestMapping
                    produces : String[] - RequestMapping
                    value : String[] - RequestMapping
                    new - create new object
                    nls - non-externalized string marker
                    nullable - nullable
                    Press "Space" to show Template Proposals
    }
}
```

Servers     Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable     Smart Insert     27 : 21

Package Explorer     TopicController.java     TopicService.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST)
    public void addTopic() {
    }
}
```

Quick Access     Spring

Servers     Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable     Smart Insert     27 : 41

Package Explorer     TopicController.java     TopicService.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.)
    public void addTopic() {
    }
}
```

class : Class<org.springframework.web.bind.an  
✓ DELETE : RequestMethod - RequestMethod  
✓ GET : RequestMethod - RequestMethod  
✓ HEAD : RequestMethod - RequestMethod  
✓ OPTIONS : RequestMethod - RequestMethod  
✓ PATCH : RequestMethod - RequestMethod  
✓ POST : RequestMethod - RequestMethod  
✓ PUT : RequestMethod - RequestMethod  
✓ TRACE : RequestMethod - RequestMethod

Press '^Space' to show Template Proposals

Servers     Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable     Smart Insert     28 : 42

Package Explorer     TopicController.java     TopicService.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.)
    public void addTopic() {
    }
}
```

class : Class<org.springframework.web.bind.an  
✓ DELETE : RequestMethod - RequestMethod  
✓ GET : RequestMethod - RequestMethod  
✓ HEAD : RequestMethod - RequestMethod  
✓ OPTIONS : RequestMethod - RequestMethod  
✓ PATCH : RequestMethod - RequestMethod  
✓ POST : RequestMethod - RequestMethod  
✓ PUT : RequestMethod - RequestMethod  
✓ TRACE : RequestMethod - RequestMethod

Press '^Space' to show Template Proposals

Servers     Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable     Smart Insert     28 : 42

Package Explorer     TopicController.java     TopicService.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST)
    public void addTopic() {
    }
}
```

Servers     Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable     Smart Insert     31 : 6

Package Explorer     TopicController.java     TopicService.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }
}
```

The method addTopic(Topic) is undefined for the type TopicService

3 quick fixes available:

- Change to 'getTopic...'
- Create method 'addTopic(Topic)' in type 'TopicService'
- Add cast to 'TopicService'

Servers     Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable     Smart Insert     31 : 38

Package Explorer     TopicController.java     TopicService.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@Service
public class TopicService {

    private List<Topic> topics = Arrays.asList(
        new Topic("spring", "Spring Framework", "Spring Framework Description"),
        new Topic("java", "Core Java", "Core Java Description"),
        new Topic("javascript", "JavaScript", "JavaScript Description")
    );

    public List<Topic> getAllTopics() {
        return topics;
    }

    public Topic getTopic(String id) {
        return topics.stream().filter(t -> t.getId().equals(id)).findFirst().get();
    }

    public void addTopic(Topic topic) {
        // TODO Auto-generated method stub
    }
}
```

Servers     Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable     Smart Insert     26 : 30

Package Explorer     TopicController.java     TopicService.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@Service
public class TopicService {

    private List<Topic> topics = Arrays.asList(
        new Topic("spring", "Spring Framework", "Spring Framework Description"),
        new Topic("java", "Core Java", "Core Java Description"),
        new Topic("javascript", "JavaScript", "JavaScript Description")
    );

    public List<Topic> getAllTopics() {
        return topics;
    }

    public Topic getTopic(String id) {
        return topics.stream().filter(t -> t.getId().equals(id)).findFirst().get();
    }

    public void addTopic(Topic topic) {
        topics.add(topic);
    }
}
```

Servers     Boot Dashboard

Pivotal tc Server Developer Edition v3.1 [Stopped]

Writable     Smart Insert     26 : 27

Spring - course-api/src/main/java/io/javabrains/springbootstarter/topic/TopicController.java - Spring Tool Suite - /Users/kkothagai/Documents/springboot

Quick Access

Builder Team Library

Runner Import

New Tab + No Environment

Filter History Collections

GET Enter request URL. Params Send Save

Authorization Headers Body Pre-request Script Tests Code

Type No Auth

Nothing in your history yet. Requests that you send through Postman are automatically saved here.

Response

Hit the Send button to get a response.

Writable Smart Insert 31 : 38

Spring - course-api/src/main/java/io/javabrains/springbootstarter/topic/TopicController.java - Spring Tool Suite - /Users/kkothagai/Documents/springboot

Quick Access

Builder Team Library

Runner Import

Filter History Collections

No Environment

GET http://localhost:8080/topics

Params Send Save Bulk Edit

Authorization Headers Body Pre-request Script Tests Code

Type No Auth

Body Cookies Headers (3) Tests Status: 200 OK Time: 148 ms

Pretty Raw Preview JSON

```
1- [
2- {
3-   "id": "spring",
4-   "name": "Spring Framework",
5-   "description": "Spring Framework Description"
6- },
7- {
8-   "id": "java",
9-   "name": "Core Java",
10-  "description": "Core Java Description"
11- },
12- {
13-   "id": "javascript",
14-   "name": "JavaScript",
15-   "description": "JavaScript Description"
```

Spring - course-api/src/main/java/io/javabrains/springbootstarter/topic/TopicController.java - Spring Tool Suite - /Users/kkothagai/Documents/springboot

Quick Access

Builder Team Library

Runner Import

Filter History Collections

No Environment

GET http://localhost:8080/topics/spring Params Send Save

key value

Authorization Headers Body Pre-request Script Tests Bulk Edit

Type No Auth

Body Cookies Headers (3) Tests Status: 200 OK Time: 25 ms

Pretty Raw Preview JSON

```
1 + {  
2   "id": "spring",  
3   "name": "Spring Framework",  
4   "description": "Spring Framework Description"  
5 }
```

Builder Team Library

http://localhost:8080/ No Environment

GET http://localhost:8080/topics/java Params Send Save

key value

Authorization Headers Body Pre-request Script Tests Bulk Edit Code

Type No Auth

Body Cookies Headers (3) Tests Status: 200 OK Time: 10 ms

Pretty Raw Preview JSON

```
1- {
2-   "id": "java",
3-   "name": "Core Java",
4-   "description": "Core Java Description"
5- }
```

Package Explorer Servers TopicController.java Console Markers Progress

```
package io.javabrains.springbootstarter.topic;

import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.*;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping(method = RequestMethod.GET)
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping(value = "/topic/{id}", method = RequestMethod.GET)
    public Topic getTopic(@PathVariable("id") int id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(value = "/topic", method = RequestMethod.POST)
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }

    @RequestMapping(value = "/topic/{id}", method = RequestMethod.PUT)
    public void updateTopic(@PathVariable("id") int id, @RequestBody Topic topic) {
        topicService.updateTopic(id, topic);
    }

    @RequestMapping(value = "/topic/{id}", method = RequestMethod.DELETE)
    public void deleteTopic(@PathVariable("id") int id) {
        topicService.deleteTopic(id);
    }
}
```

<terminated> CourseApiApp [Java Application] /Library/Java/VirtualMachines/jdk1.8.0\_66.jdk/Contents/Home - 2016-12-27 16:34:38.005 - INFO 1814 --- [ost-startStop-1] o.s.web.context.ContextLo - 2016-12-27 16:34:38.120 - INFO 1814 --- [ost-startStop-1] o.s.b.w.servlet.ServletRe - 2016-12-27 16:34:38.123 - INFO 1814 --- [ost-startStop-1] o.s.b.w.servlet.FilterReg - 2016-12-27 16:34:38.124 - INFO 1814 --- [ost-startStop-1] o.s.b.w.servlet.FilterReg - 2016-12-27 16:34:38.124 - INFO 1814 --- [ost-startStop-1] o.s.b.w.servlet.FilterReg - 2016-12-27 16:34:38.124 - INFO 1814 --- [ost-startStop-1] o.s.b.w.servlet.FilterReg - 2016-12-27 16:34:38.343 - INFO 1814 --- [ main] s.w.s.m.m.a.RequestMappin - 2016-12-27 16:34:38.405 - INFO 1814 --- [ main] s.w.s.m.m.a.RequestMappin - 2016-12-27 16:34:38.406 - INFO 1814 --- [ main] s.w.s.m.m.a.RequestMappin - 2016-12-27 16:34:38.406 - INFO 1814 --- [ main] s.w.s.m.m.a.RequestMappin - 2016-12-27 16:34:38.406 - INFO 1814 --- [ main] s.w.s.m.m.a.RequestMappin - 2016-12-27 16:34:38.409 - INFO 1814 --- [ main] s.w.s.m.m.a.RequestMappin - 2016-12-27 16:34:38.409 - INFO 1814 --- [ main] s.w.s.m.m.a.RequestMappin - 2016-12-27 16:34:38.436 - INFO 1814 --- [ main] o.s.w.s.handler.SimpleUrl - 2016-12-27 16:34:38.436 - INFO 1814 --- [ main] o.s.w.s.handler.SimpleUrl - 2016-12-27 16:34:38.470 - INFO 1814 --- [ main] o.s.w.s.handler.SimpleUrl - 2016-12-27 16:34:38.586 - INFO 1814 --- [ main] o.s.j.e.a.AnnotationMBean - 2016-12-27 16:34:38.660 - INFO 1814 --- [ main] s.b.c.e.t.TomcatEmbeddedS - 2016-12-27 16:34:38.663 - INFO 1814 --- [ main] i.j.springbootstarter.Cou - 2016-12-27 16:34:43.925 - INFO 1814 --- [nio-8080-exec-1] o.a.c.c.C.[Tomcat].[local - 2016-12-27 16:34:43.926 - INFO 1814 --- [nio-8080-exec-1] o.s.web.servlet.Dispatche - 2016-12-27 16:34:43.938 - INFO 1814 --- [nio-8080-exec-1] o.s.web.servlet.Dispatche

Servers Boot Dashboard Pivotal tc Server Developer Edition v3.1 [Stopped]

The screenshot shows the Spring Tool Suite interface with the following details:

- Package Explorer:** Shows the project structure with `course-api [boot]` and `Servers`.
- TopicController.java:** The code defines a REST controller for topics. It includes imports for `java.util.Arrays`, `@RestController`, and `@Autowired`. It has three methods: `getAllTopics()` which returns a list of topics, `getTopic(String id)` which returns a specific topic by ID, and `addTopic(Topic topic)` which adds a new topic.
- TopicService.java:** A placeholder file indicated by a question mark icon.
- Servers:** Shows a single server entry: `Pivotal tc Server Developer Edition v3.1 [Stopped]`.
- Bottom Status Bar:** Displays "Writable", "Smart Insert", and the current line number "20 : 6".

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;
import org.springframework.web.bind.annotation.RestController;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;
import io.javabrains.springbootstarter.topic.Topic;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }
}
```

Runner Import

Builder Team Library

No Environment

POST http://localhost:8080/topics

Params Send Save

key value

Authorization Headers Body Pre-request Script Tests

Code

form-data x-www-form-urlencoded raw binary Text

```
1 {
2   "id": "javoee",
3   "name": "Enterprise Java",
4   "description": "Enterprise Java Description"
5 }
```

History Collections

Save to collection

Today

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Builder Team Library

http://localhost:8080/ No Environment

POST http://localhost:8080/topics Params Send Save

key	value
Content-Type	application/json

Authorization Headers (1) Body Pre-request Script Tests Bulk Edit Presets

Content-Type application/json

key value

Response

Hit the Send button to get a response.

The screenshot shows the Postman application interface. On the left, there's a sidebar with 'History' selected, showing a list of recent requests: 'GET http://localhost:8080/topics/java', 'POST http://localhost:8080/topics' (which is highlighted with an orange background), 'GET http://localhost:8080/topics/spring', and 'GET http://localhost:8080/topics'. The main workspace is a builder screen for a POST request to 'http://localhost:8080/topics'. The 'Headers' tab is active, containing one header: 'Content-Type' with the value 'application/json'. Below the headers, there's a large 'Response' section with the placeholder text 'Hit the Send button to get a response.' A 'Send' button is visible at the top right of the request configuration area.

Runner Import

Builder Team Library

No Environment

POST http://localhost:8080/topics

Params Send Save

key value

Authorization Headers (1) Body Pre-request Script Tests

Code

form-data x-www-form-urlencoded raw binary JSON (application/json)

```
1 - {
2   "id": "javaee",
3   "name": "Enterprise Java",
4   "description": "Enterprise Java Description"
5 }
```

History Collections

Save to collection

Today

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Runner Import

Builder Team Library

Filter

History Collections

No Environment

POST http://localhost:8080/topics

Params Send Save

key value

Authorization Headers (1) Body Pre-request Script Tests Bulk Edit

Code

form-data x-www-form-urlencoded raw binary JSON (application/json)

```
1 {  
2   "id": "javaee",  
3   "name": "Enterprise Java",  
4   "description": "Enterprise Java Description"  
5 }
```

Writable Smart Insert 37 : 1

The screenshot shows the Postman application interface. At the top, there's a toolbar with various icons. Below it is a navigation bar with 'Builder' and 'Team Library' tabs, and a 'Quick Access' dropdown. On the left, there's a sidebar with 'History' and 'Collections' tabs, and a 'Filter' search bar. The main area shows a POST request to 'http://localhost:8080/topics'. The 'Body' tab is selected, showing the JSON payload: { id: 'javaee', name: 'Enterprise Java', description: 'Enterprise Java Description' }. The 'Headers' tab shows one header: '(1)'. The 'Tests' tab is empty. The 'Code' tab is visible at the bottom right. On the far right, there's a vertical toolbar with various icons.

Package Explorer    TopicController.java    Console    Markers    Progress

course-api [boot]

src/main/java  
    io.javabrains.springbootstarter  
    io.javabrains.springbootstarter.hello  
    io.javabrains.springbootstarter.topic  
        Topic.java  
        TopicController.java  
        TopicService.java

src/main/resources

src/test/java

src/test/resources

JRE System Library [JavaSE-1.8]

Maven Dependencies

src

target

pom.xml

Servers

TopicController.java

```
package io.javabrains.springbootstarter.topic;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.*;
import io.javabrains.springbootstarter.topic.Topic;

@RestController
public class TopicController {
    @Autowired
    private TopicService topicService;
    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }
    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }
    @RequestMapping(value = "/topics", method = RequestMethod.POST)
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }
}
```

Console

2016-12-27 16:47:12.449 - INFO 1962 --- [main] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped URL [/\*\*] onto handler [s.w.s.m.m.a.RequestMappingHandlerMapping@53d1f1c]

2016-12-27 16:47:12.452 - INFO 1962 --- [main] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped URL [/\*\*] onto handler [o.s.w.s.handler.SimpleUrlHandler@1a1a1a1]

2016-12-27 16:47:12.452 - INFO 1962 --- [main] s.w.s.m.m.a.RequestMappingHandlerMapping : Mapped URL [/\*\*] onto handler [o.s.w.s.handler.SimpleUrlHandler@1a1a1a1]

2016-12-27 16:47:12.474 - INFO 1962 --- [main] o.s.w.s.handler.SimpleUrlHandler : null

2016-12-27 16:47:12.474 - INFO 1962 --- [main] o.s.w.s.handler.SimpleUrlHandler : null

2016-12-27 16:47:12.499 - INFO 1962 --- [main] o.s.w.s.handler.SimpleUrlHandler : null

2016-12-27 16:47:12.596 - INFO 1962 --- [main] o.s.j.e.a.AnnotationMBeanExporter : Registering beans for service dynamic registration.

2016-12-27 16:47:12.641 - INFO 1962 --- [main] s.b.c.e.t.TomcatEmbeddedServletContainer : Tomcat started on port(s): 8080 (http)

2016-12-27 16:47:12.644 - INFO 1962 --- [main] i.j.springbootstarter.CourseApiApp : Started CourseApiApp in 1.394 seconds (JVM running for 2.001)

2016-12-27 16:47:16.086 - INFO 1962 --- [nio-8080-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring DispatcherServlet 'dispatcherServlet'

2016-12-27 16:47:16.086 - INFO 1962 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Starting Servlet 'dispatcherServlet'

2016-12-27 16:47:16.097 - INFO 1962 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Completed initialization in 0 ms

io.javabrains.springbootstarter.topic.Topic@677b35a4

2016-12-27 16:47:16.182 - ERROR 1962 --- [nio-8080-exec-1] o.a.c.c.C.[.].[dispatcherServlet] : Servlet.service() for servlet 'dispatcherServlet' in context with path '/' threw exception [null] with root cause

java.lang.UnsupportedOperationException: null

at java.util.AbstractList.add(AbstractList.java:148) ~[na:1.8.0\_66]

at java.util.AbstractList.add(AbstractList.java:108) ~[na:1.8.0\_66]

at io.javabrains.springbootstarter.topic.TopicService.addTopic(TopicService.java:22) ~[na:1.8.0\_66]

at io.javabrains.springbootstarter.topic.TopicController.addTopic(TopicController.java:21) ~[na:1.8.0\_66]

at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) ~[na:1.8.0\_66]

at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62) ~[na:1.8.0\_66]

at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43) ~[na:1.8.0\_66]

Servers

Boot Dashboard

Type tags to match:

local

course-api [8080]

Package Explorer    TopicController.java    TopicService.java

```
package io.javabrainsspringbootstarter.topic;

import java.util.Arrays;

@Service
public class TopicService {

    private List<Topic> topics = new ArrayList<>(Arrays.asList(
        new Topic("spring", "Spring Framework"),
        new Topic("java", "Core Java"),
        new Topic("javascript", "JavaScript")));
    // ArrayList cannot be resolved to a type

    public List<Topic> getAllTopics() {
        return topics;
    }

    public Topic getTopic(String id) {
        return topics.stream().filter(topic -> topic.getId().equals(id))
            .findFirst().get();
    }

    public void addTopic(Topic topic) {
        topics.add(topic);
    }
}
```

Quick Access    Spring

Servers    Boot Dashboard

Type tags to match

local  
course-api [8080]

Writable    Smart Insert    14 : 58

Package Explorer    TopicController.java    TopicService.java

```
package io.javabrains.springbootstarter.topic;

import java.util.ArrayList;

@Service
public class TopicService {

    private List<Topic> topics = new ArrayList<>(Arrays.asList(
        new Topic("spring", "Spring Framework", "Spring Framework Description"),
        new Topic("java", "Core Java", "Core Java Description"),
        new Topic("javascript", "JavaScript", "JavaScript Description")
    ));

    public List<Topic> getAllTopics() {
        return topics;
    }

    public Topic getTopic(String id) {
        return topics.stream().filter(t -> t.getId().equals(id)).findFirst().get();
    }

    public void addTopic(Topic topic) {
        topics.add(topic);
    }
}
```

Servers    Boot Dashboard

Type tags to match:

local  
course-api [8080]

Writable    Smart Insert    20 : 6

Spring - course-api/src/main/java/io/javabrains/springbootstarter/topic/TopicService.java - Spring Tool Suite - /Users/kkothagai/Documents/springboot

Quick Access

Builder Team Library

Runner Import

Filter

History Collections

No Environment

http://localhost:8080/ POST http://localhost:8080/topics

Send Save Bulk Edit

Authorization Headers (1) Body Pre-request Script Tests

Code

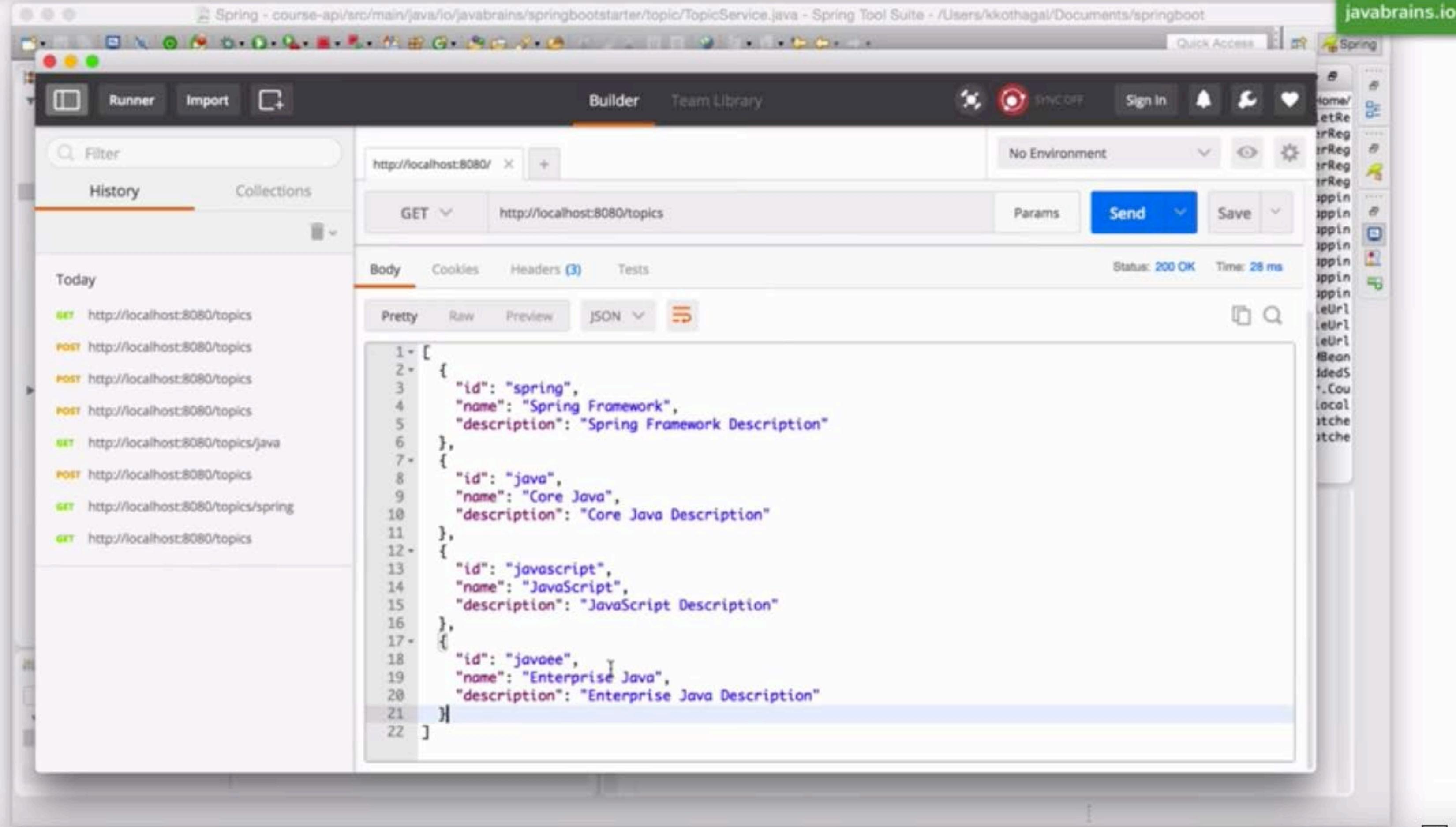
form-data x-www-form-urlencoded raw binary JSON (application/json)

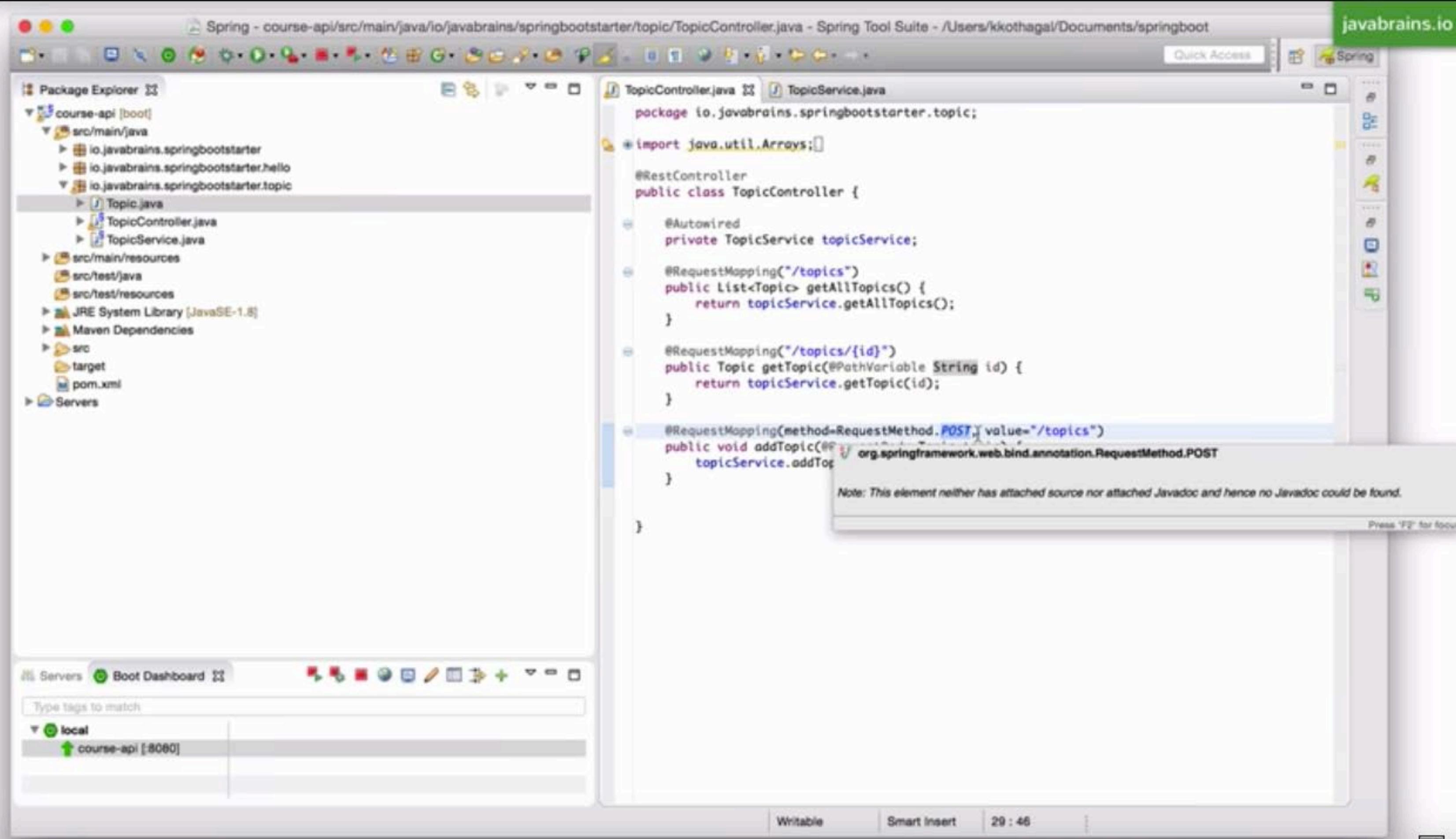
```
1- {
2-   "id": "javaee",
3-   "name": "Enterprise Java",
4-   "description": "Enterprise Java Description"
5- }
```

Today

- POST http://localhost:8080/topics
- POST http://localhost:8080/topics
- GET http://localhost:8080/topics/java
- POST http://localhost:8080/topics
- GET http://localhost:8080/topics/spring
- GET http://localhost:8080/topics

javabrains.io





The screenshot shows the Eclipse IDE interface with two Java files open in the editor:

- TopicController.java** (selected tab):

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }
}
```
- TopicService.java** (tab):

```
package io.javabrains.springbootstarter.topic;
```

The bottom left panel shows the **Boot Dashboard** with a single entry: **local**.

Bottom status bar: Writable, Smart Insert, 35 : 19, http://download.o...positeContent.xml

The screenshot shows the Eclipse IDE interface with several open windows:

- Package Explorer**: Shows the project structure with `course-api [boot]` and `Servers`.
- TopicController.java**: A Java file containing the following code:

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }

    @RequestMapping(method=RequestMethod.PUT, value="/topics")
    public void updateTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }
}
```

- TopicService.java**: A Java file shown in the background tab.
- Servers**: A window showing a single server entry: `local`.
- Boot Dashboard**: A window with a search bar and a list of items, one of which is `local`.
- Quick Access**: A bar at the top right with the URL `javabrains.io`.

The screenshot shows the Eclipse IDE interface with two Java files open in the editor:

- TopicController.java**:

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }

    @RequestMapping(method=RequestMethod.PUT, value="/topics/{id}")
    public void updateTopic(@RequestBody Topic topic, @PathVariable String id) {
        topicService.addTopic(topic);
    }
}
```
- TopicService.java**:

```
package io.javabrains.springbootstarter.topic;
```

The bottom left corner shows the "Boot Dashboard" view with a "local" server entry.

Bottom status bar: Writable, Smart Insert, 36 : 38, http://download.ec...0/artifacts.xml.xz

## Package Explorer

course-api [boot]

Servers

## TopicController.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }

    @RequestMapping(method=RequestMethod.PUT, value="/topics/{id}")
    public void updateTopic(@RequestBody Topic topic, @PathVariable String id) {
        topicService.updateTopic(id, topic);
    }
}
```

The method updateTopic(String, Topic) is undefined for the type TopicService  
2 quick fixes available:

- Create method 'updateTopic(String, Topic)' in type 'TopicService'
- Add cast to 'topicService'

## Servers

## Boot Dashboard

Type tags to match

&gt; local

The screenshot shows an IDE interface with several windows open. The top window displays the code for `TopicService.java`, which defines a service class for managing topics. The code includes imports for `java.util.ArrayList` and `io.javabrains.springbootstarter.topic`. It contains methods for getting all topics, getting a specific topic by ID, adding a new topic, and updating a topic. A placeholder comment for the update method indicates it's an auto-generated stub. The bottom window shows the `TopicController.java` file, which is currently empty. The left sidebar shows the project structure with a `course-api [boot]` project containing `Servers`. The bottom navigation bar includes tabs for `Writable`, `Smart Insert`, and `30 : 1`.

```
package io.javabrains.springbootstarter.topic;

import java.util.ArrayList;
import java.util.List;

@Service
public class TopicService {

    private List<Topic> topics = new ArrayList<>(Arrays.asList(
        new Topic("spring", "Spring Framework", "Spring Framework Description"),
        new Topic("java", "Core Java", "Core Java Description"),
        new Topic("javascript", "JavaScript", "JavaScript Description")
    ));

    public List<Topic> getAllTopics() {
        return topics;
    }

    public Topic getTopic(String id) {
        return topics.stream().filter(t -> t.getId().equals(id)).findFirst().get();
    }

    public void addTopic(Topic topic) {
        topics.add(topic);
    }

    public void updateTopic(String id, Topic topic) {
        // TODO Auto-generated method stub
    }
}
```

The screenshot shows a Java code editor within an IDE. The top menu bar includes 'File', 'Edit', 'Run', 'View', 'Search', 'Project', 'Server', 'Help', and 'Quick Access'. The title bar displays 'TopicController.java' and 'TopicService.java'. The left sidebar shows 'Package Explorer' with 'course-api [boot]' and 'Servers'. The bottom left shows 'Servers' and 'Boot Dashboard'. The bottom status bar indicates 'Writable', 'Smart Insert', and '35 : 32'. The code in the editor is:

```
package io.javabrains.springbootstarter.topic;

import java.util.ArrayList;

@Service
public class TopicService {

    private List<Topic> topics = new ArrayList<>(Arrays.asList(
        new Topic("spring", "Spring Framework", "Spring Framework Description"),
        new Topic("java", "Core Java", "Core Java Description"),
        new Topic("javascript", "JavaScript", "JavaScript Description")
    ));

    public List<Topic> getAllTopics() {
        return topics;
    }

    public Topic getTopic(String id) {
        return topics.stream().filter(t -> t.getId().equals(id)).findFirst().get();
    }

    public void addTopic(Topic topic) {
        topics.add(topic);
    }

    public void updateTopic(String id, Topic topic) {
        for (int i = 0; i < topics.size(); i++) {
            Topic t = topics.get(i);
            if (t.getId().equals(id)) {
                topics.set(i, topic);
                return;
            }
        }
    }
}
```

The screenshot shows the Eclipse IDE interface with the following details:

- Top Bar:** Quick Access, javabrainz.io
- Left Sidebar:** Package Explorer (course-api [boot], Servers), Servers Dashboard
- Central Area:** TopicController.java and TopicService.java code editor.

**TopicController.java:**

```
package io.javabrainz.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }

    @RequestMapping(method=RequestMethod.PUT, value="/topics/{id}")
    public void updateTopic(@RequestBody Topic topic, @PathVariable String id) {
        topicService.updateTopic(id, topic);
    }
}
```

**TopicService.java:**

```
package io.javabrainz.springbootstarter.topic;
```

**Servers Dashboard:**

- Type tags to match
- local

**Bottom Status Bar:** Writable, Smart Insert, 35 : 42

## Package Explorer

course-api [boot]  
Servers

## TopicController

```
package io.course.api.controller;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.*;
import org.springframework.web.bind.annotation.RestController;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.PutMapping;
import org.springframework.web.bind.annotation.DeleteMapping;
import org.springframework.web.bind.annotation.PathVariable;
import io.course.api.model.Topic;
import io.course.api.service.TopicService;
```

## Console

```
course-api - CourseApiApp [Spring Boot App] /Library/java/JdkVirtualMachines/jdk1.8.0_66.jdk/Contents/Home/
- 2016-12-27 07:48:55.943 - INFO 72110 --- [           main] o.s.boot.SpringApplication: Configuring embedded web server ...
- 2016-12-27 07:48:57.450 - INFO 72110 --- [           main] o.s.boot.context.embedded.AnnotationConfigEmbeddedWebApplicationContext: Tomcat initialized with port = 8080
- 2016-12-27 07:48:57.462 - INFO 72110 --- [           main] o.apache.catalina.core.StandardEngine: Starting Coyote HTTP/1.1 on http://0.0.0.0:8080
- 2016-12-27 07:48:57.464 - INFO 72110 --- [           main] o.apache.catalina.core.StandardHost: Starting Host[localhost]
- 2016-12-27 07:48:57.547 - INFO 72110 --- [ost-startStop-1] o.a.c.c.C.[Tomcat].[localhost]: Starting ProtocolHandler ["http-nio-8080"]
- 2016-12-27 07:48:57.547 - INFO 72110 --- [ost-startStop-1] o.s.web.context.ContextLoader: Root WebApplicationContext: initialization started
- 2016-12-27 07:48:57.662 - INFO 72110 --- [ost-startStop-1] o.s.b.w.servlet.ServletRegistrationBean: Mapping servlet: 'dispatcher' to [/]
- 2016-12-27 07:48:57.665 - INFO 72110 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBean: Mapped filter: 'characterEncodingFilter' to URL patterns: [/*]
- 2016-12-27 07:48:57.666 - INFO 72110 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBean: Mapped filter: 'hiddenHttpMethodFilter' to URL patterns: [/*]
- 2016-12-27 07:48:57.666 - INFO 72110 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBean: Mapped filter: 'httpMethodFilter' to URL patterns: [/*]
- 2016-12-27 07:48:57.666 - INFO 72110 --- [ost-startStop-1] o.s.b.w.servlet.FilterRegistrationBean: Mapped filter: 'requestContextFilter' to URL patterns: [/*]
- 2016-12-27 07:48:57.883 - INFO 72110 --- [           main] s.w.s.m.m.a.RequestMapper: Mapped URL pattern: '/topics/{id}' to handler: 'io.course.api.controller.TopicController@3f3a333'
- 2016-12-27 07:48:57.945 - INFO 72110 --- [           main] s.w.s.m.m.a.RequestMapper: Mapped URL pattern: '/topics' to handler: 'io.course.api.controller.TopicController@3f3a333'
- 2016-12-27 07:48:57.946 - INFO 72110 --- [           main] s.w.s.m.m.a.RequestMapper: Mapped URL pattern: '/topics/{id}/delete' to handler: 'io.course.api.controller.TopicController@3f3a333'
- 2016-12-27 07:48:57.946 - INFO 72110 --- [           main] s.w.s.m.m.a.RequestMapper: Mapped URL pattern: '/topics' to handler: 'io.course.api.controller.TopicController@3f3a333'
- 2016-12-27 07:48:57.947 - INFO 72110 --- [           main] s.w.s.m.m.a.RequestMapper: Mapped URL pattern: '/topics/{id}' to handler: 'io.course.api.controller.TopicController@3f3a333'
- 2016-12-27 07:48:57.950 - INFO 72110 --- [           main] s.w.s.m.m.a.RequestMapper: Mapped URL pattern: '/topics' to handler: 'io.course.api.controller.TopicController@3f3a333'
- 2016-12-27 07:48:57.951 - INFO 72110 --- [           main] s.w.s.m.m.a.RequestMapper: Mapped URL pattern: '/topics/{id}/delete' to handler: 'io.course.api.controller.TopicController@3f3a333'
- 2016-12-27 07:48:57.991 - INFO 72110 --- [           main] o.s.w.s.handler.SimpleUrlHandlerMapping: Mapped URL path: '/topics/{id}' to handler: 'io.course.api.controller.TopicController@3f3a333'
- 2016-12-27 07:48:57.991 - INFO 72110 --- [           main] o.s.w.s.handler.SimpleUrlHandlerMapping: Mapped URL path: '/topics' to handler: 'io.course.api.controller.TopicController@3f3a333'
- 2016-12-27 07:48:58.019 - INFO 72110 --- [           main] o.s.w.s.handler.SimpleUrlHandlerMapping: Mapped URL path: '/topics/{id}/delete' to handler: 'io.course.api.controller.TopicController@3f3a333'
- 2016-12-27 07:48:58.130 - INFO 72110 --- [           main] o.s.j.e.a.AnnotationMBeanExporter: Registering beans for exposure on application startup
```

```
@RequestMapping(method=RequestMethod.PUT, value="/topics/{id}")
public void updateTopic(@RequestBody Topic topic, @PathVariable String id) {
    topicService.updateTopic(id, topic);
}
```

}

## Servers

Boot Dashboard



Type tags to match:

local

javabrains.io

Package Explorer course-a Servers

Runner Import

Builder Team Library Sync OFF Sign In

Filter History Collections

http://localhost:8080/ +

GET http://localhost:8080/topics Params Send Save

Body Cookies Headers (3) Tests Status: 200 OK Time: 154 ms

Pretty Raw Preview JSON

1+ [

2+ {

3+ "id": "spring",

4+ "name": "Spring Framework",

5+ "description": "Spring Framework Description"

6+ },

7+ {

8+ "id": "java",

9+ "name": "Core Java",

10+ "description": "Core Java Description"

11+ },

12+ {

13+ "id": "javascript",

14+ "name": "JavaScript",

15+ "description": "JavaScript Description"

16+ }

17]

Today

GET http://localhost:8080/topics

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Servers local

Type tags to

javabrains.io

Builder Team Library

Runner Import

course-a Servers

Filter History Collections

No Environment

GET http://localhost:8080/topics

Params Send Save

Body Cookies Headers (3) Tests Status: 200 OK Time: 154 ms

Pretty Raw Preview JSON

GET http://localhost:8080/topics

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

```
1- [  
2- {  
3-   "id": "spring",  
4-   "name": "Spring Framework",  
5-   "description": "Spring Framework Description"  
6- },  
7- {  
8-   "id": "java",  
9-   "name": "Core Java",  
10-  "description": "Core Java Description"  
11- },  
12- {  
13-   "id": "javascript",  
14-   "name": "JavaScript",  
15-   "description": "JavaScript Description"  
16- }]  
17 ]
```

Servers Type tags to local

Runner Import

Builder Team Library

Sync OFF Sign In

Filter History Collections

No Environment

PUT http://localhost:8080/topics

Body Cookies Headers (3) Tests Status: 200 OK Time: 154 ms

Pretty Raw Preview JSON

```
1- [  
2- {  
3-   "id": "spring",  
4-   "name": "Spring Framework",  
5-   "description": "Spring Framework Description"  
6- },  
7- {  
8-   "id": "java",  
9-   "name": "Core Java",  
10-  "description": "Core Java Description"  
11- },  
12- {  
13-   "id": "javascript",  
14-   "name": "JavaScript",  
15-   "description": "JavaScript Description"  
16- }  
17- ]
```

GET http://localhost:8080/topics

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Servers

Type tags to

local

javabrains.io

Package Explorer course-a Servers

Runner Import

Builder Team Library Sync OFF Sign In

Filter History Collections

No Environment

PUT http://localhost:8080/topics/javascript Params Send Save

Status: 200 OK Time: 154 ms

Today

GET http://localhost:8080/topics

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Body Cookies Headers (3) Tests

Pretty Raw Preview JSON

```
1+ [
2- {
3-   "id": "spring",
4-   "name": "Spring Framework",
5-   "description": "Spring Framework Description"
6- },
7- {
8-   "id": "java",
9-   "name": "Core Java",
10-  "description": "Core Java Description"
11- },
12- {
13-   "id": "javascript",
14-   "name": "JavaScript",
15-   "description": "JavaScript Description"
16- }
17]
```

Servers Type tags to local

javabrains.io

Package Explorer course-a Servers

Runner Import

Builder Team Library Sync OFF Sign In

Filter History Collections

No Environment

PUT http://localhost:8080/topics/javascript Params Send Save

Authorization Headers (1) Body Pre-request Script Tests Code

form-data x-www-form-urlencoded raw binary Text

```
1 {  
2   "id": "javascript",  
3   "name": "Updated JavaScript",  
4   "description": "Updated JavaScript Description"  
5 }
```

GET http://localhost:8080/topics

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Servers local

Type tags to

Status: 200 OK Time: 154 ms

Body Cookies Headers (3) Tests

Pretty Raw Preview JSON

javabrains.io

Package Explorer course-a Servers

Runner Import

Builder Team Library Sync OFF Sign In

Filter History Collections

No Environment

PUT http://localhost:8080/topics/javascript Params Send Save

Authorization Headers (1) Body Pre-request Script Tests Code

Content-Type application/json

key value

Bulk Edit Presets

Today

PUT http://localhost:8080/topics/javascript

GET http://localhost:8080/topics

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Servers

Type tags to local

Status: 200 OK Time: 55 ms

Pretty Raw Preview Text

1

javabrains.io

Runner Import

Builder Team Library

Sync OFF Sign In

History Collections

Filter

No Environment

GET http://localhost:8080/topics

Params Send Save

Authorization Headers (1) Body Pre-request Script Tests

Content-Type application/json

key value

Bulk Edit Presets

Code

Today

PUT http://localhost:8080/topics/javascript

GET http://localhost:8080/topics

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Status: 200 OK Time: 55 ms

Body Cookies Headers (2) Tests

Pretty Raw Preview Text

1

Servers

Type tags to

local

The screenshot shows the Eclipse IDE interface with the following details:

- Top Bar:** Shows the Eclipse toolbar and the "Quick Access" button.
- Left Sidebar:** "Package Explorer" view showing a project named "course-api [boot]" and a "Servers" section.
- Central View:** The code editor displays `TopicController.java`. The code is a Spring REST controller for managing topics. It includes imports for `java.util.Arrays`, annotations for `@RestController` and `@Autowired`, and methods for listing all topics, getting a topic by ID, adding a new topic, updating an existing topic, and deleting a topic.
- Bottom Bar:** Shows the "Servers" and "Boot Dashboard" tabs, along with a toolbar and a search bar.

```
TopicController.java
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }

    @RequestMapping(method=RequestMethod.PUT, value="/topics/{id}")
    public void updateTopic(@RequestBody Topic topic, @PathVariable String id) {
        topicService.updateTopic(id, topic);
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }
}
```

The screenshot shows the Eclipse IDE interface with two Java files open in the editor:

- TopicController.java** (selected tab):

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }

    @RequestMapping(method=RequestMethod.PUT, value="/topics/{id}")
    public void updateTopic(@RequestBody Topic topic, @PathVariable String id) {
        topicService.updateTopic(id, topic);
    }

    @RequestMapping(method=RequestMethod.DELETE, value="/topics/{id}")
    public Topic deleteTopic(@PathVariable String id) {
        return topicService.deleteTopic(id);
    }
}
```
- TopicService.java** (tab):

```
package io.javabrains.springbootstarter.topic;
```

The bottom left panel shows the **Boot Dashboard** with a single entry: **local**.

Bottom status bar: Writable, Smart Insert, 41 : 45.

The screenshot shows a Java IDE interface with several windows open. The central window displays the code for `TopicService.java`. The code defines a service class `TopicService` that interacts with a list of `Topic` objects. It includes methods for getting all topics, getting a specific topic by ID, adding a topic, updating a topic, and deleting a topic. The code uses Java 8 features like streams and lambdas. The IDE's toolbar and status bar are visible at the bottom.

```
package io.javabrains.springbootstarter.topic;

import java.util.ArrayList;
import java.util.List;

@Service
public class TopicService {

    private List<Topic> topics = new ArrayList<>(Arrays.asList(
        new Topic("spring", "Spring Framework", "Spring Framework Description"),
        new Topic("java", "Core Java", "Core Java Description"),
        new Topic("javascript", "JavaScript", "JavaScript Description")
    ));

    public List<Topic> getAllTopics() {
        return topics;
    }

    public Topic getTopic(String id) {
        return topics.stream().filter(t -> t.getId().equals(id)).findFirst().get();
    }

    public void addTopic(Topic topic) {
        topics.add(topic);
    }

    public void updateTopic(String id, Topic topic) {
        for (int i = 0; i < topics.size(); i++) {
            Topic t = topics.get(i);
            if (t.getId().equals(id)) {
                topics.set(i, topic);
                return;
            }
        }
    }

    public void deleteTopic(String id) {
        topics.removeIf(t -> t.getId().equals(id));
    }
}
```

## Package Explorer

- course-api [boot]
- Servers

## TopicController.java

```
package io.javabrains.springbootstarter.topic;

import java.util.Arrays;

@RestController
public class TopicController {

    @Autowired
    private TopicService topicService;

    @RequestMapping("/topics")
    public List<Topic> getAllTopics() {
        return topicService.getAllTopics();
    }

    @RequestMapping("/topics/{id}")
    public Topic getTopic(@PathVariable String id) {
        return topicService.getTopic(id);
    }

    @RequestMapping(method=RequestMethod.POST, value="/topics")
    public void addTopic(@RequestBody Topic topic) {
        topicService.addTopic(topic);
    }

    @RequestMapping(method=RequestMethod.PUT, value="/topics/{id}")
    public void updateTopic(@RequestBody Topic topic, @PathVariable String id) {
        topicService.updateTopic(id, topic);
    }

    @RequestMapping(method=RequestMethod.DELETE, value="/topics/{id}")
    public void deleteTopic(@PathVariable String id) {
        topicService.deleteTopic(id);
    }
}
```

## Servers

## Boot Dashboard

Type tags to match

► local

javabrains.io

Builder Team Library

Sync OFF

Sign In

Filter

History Collections

No Environment

GET http://localhost:8080/topics

Params Send Save

key value

Body Cookies Headers (3) Tests Status: 200 OK Time: 12 ms

Pretty Raw Preview JSON

```
[  
  {  
    "id": "spring",  
    "name": "Spring Framework",  
    "description": "Spring Framework Description"  
  },  
  {  
    "id": "java",  
    "name": "Core Java",  
    "description": "Core Java Description"  
  },  
  {  
    "id": "javascript",  
    "name": "Updated JavaScript",  
    "description": "Updated JavaScript Description"  
  }]
```

Today

GET http://localhost:8080/topics

PUT http://localhost:8080/topics/javascript

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Servers

Type tags to

local

javabrains.io

Package Explorer course-a Servers

Runner Import

Builder Team Library Sync OFF Sign In

Filter History Collections

No Environment

GET http://localhost:8080/topics

key value

Body Cookies Headers (3) Tests Status: 200 OK Time: 130 ms

Pretty Raw Preview JSON

```
[  
  {  
    "id": "spring",  
    "name": "Spring Framework",  
    "description": "Spring Framework Description"  
  },  
  {  
    "id": "java",  
    "name": "Core Java",  
    "description": "Core Java Description"  
  },  
  {  
    "id": "javascript",  
    "name": "JavaScript",  
    "description": "JavaScript Description"  
  }]
```

Today

GET http://localhost:8080/topics

PUT http://localhost:8080/topics/javascript

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Servers local

Type tags to

javabrains.io

Package Explorer course-a Servers

Runner Import

Builder Team Library Sync OFF Sign In

Filter History Collections

No Environment

GET http://localhost:8080/topics

key value

Body Cookies Headers (3) Tests Status: 200 OK Time: 130 ms

Pretty Raw Preview JSON

```
[  
  {  
    "id": "spring",  
    "name": "Spring Framework",  
    "description": "Spring Framework Description"  
  },  
  {  
    "id": "java",  
    "name": "Core Java",  
    "description": "Core Java Description"  
  },  
  {  
    "id": "javascript",  
    "name": "JavaScript",  
    "description": "JavaScript Description"  
  }]
```

Today

GET http://localhost:8080/topics

PUT http://localhost:8080/topics/javascript

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Servers local

Type tags to

javabrains.io

Builder Team Library SYNC OFF Sign In

History Collections

Save to collection

Today

GET http://localhost:8080/topics

POST http://localhost:8080/topics

PUT http://localhost:8080/topics/javascript

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Filter

No Environment

GET http://localhost:8080/topics

Params Send Save

Status: 200 OK Time: 12 ms

Body Cookies Headers (3) Tests

Pretty Raw Preview JSON

```
1+ [  
2+ {  
3+   "id": "spring",  
4+   "name": "Spring Framework",  
5+   "description": "Spring Framework Description"  
6+ },  
7+ {  
8+   "id": "java",  
9+   "name": "Core Java",  
10+  "description": "Core Java Description"  
11+ },  
12+ {  
13+   "id": "javascript",  
14+   "name": "JavaScript",  
15+   "description": "JavaScript Description"  
16+ },  
17+ {  
18+   "id": "j2ee",  
19+   "name": "Enterprise Java",  
20+   "description": "Enterprise Java Description"  
21+ }  
22 ]
```

Type tags to...  
▶ local

http://download.e...positeContent.xml

javabrains.io

Builder Team Library

Sync Off

Sign In

No Environment

Filter

History Collections

Save to collection

DELETE http://localhost:8080/topics/javaee Params Send Save

Authorization Headers (1) Body Pre-request Script Tests Code

form-data x-www-form-urlencoded raw binary JSON (application/json)

```
1+ {
2 "id": "javascript",
3 "name": "Updated JavaScript",
4 "description": "Updated JavaScript Description"
5 }
```

Today

GET http://localhost:8080/topics

POST http://localhost:8080/topics

PUT http://localhost:8080/topics/javascript

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Servers

Type tags to

local

Status: 200 OK Time: 12 ms

Body Cookies Headers (3) Tests

Pretty Raw Preview JSON

javabrains.io

Builder Team Library

Sync Off

Sign In

No Environment

Filter

History Collections

Save to collection

DELETE http://localhost:8080/topics/javaee Params Send Save

Authorization Headers (1) Body Pre-request Script Tests Code

form-data x-www-form-urlencoded raw binary JSON (application/json)

```
1. {  
2.   "id": "javascript",  
3.   "name": "Updated JavaScript",  
4.   "description": "Updated JavaScript Description"  
5. }
```

Today

GET http://localhost:8080/topics

POST http://localhost:8080/topics

PUT http://localhost:8080/topics/javascript

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Servers

Type tags to... local

Status: 200 OK Time: 12 ms

Body Cookies Headers (3) Tests

Pretty Raw Preview JSON

1. {

javabrains.io

Runner Import Builder Team Library SYNC OFF Sign In

Filter History Collections

No Environment

Save to collection

DELETE http://localhost:8080/topics/javaee Params Send Save

Authorization Headers (1) Body Pre-request Script Tests Code

Content-Type application/json

key value

Bulk Edit Presets

Today

GET http://localhost:8080/topics

POST http://localhost:8080/topics

PUT http://localhost:8080/topics/javascript

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Body Cookies Headers (3) Tests Status: 200 OK Time: 12 ms

Pretty Raw Preview JSON

```
1- [  
2- {  
3- "id": "spring",  
4- "name": "Spring Framework",  
5- "description": "Spring Framework Description"  
6- },  
7- {  
8- "id": "java",  
9- "name": "Core Java",  
10- "description": "Core Java Description"  
11- },  
12- {  
13- "id": "javascript",  
14- "name": "JavaScript",  
15- "description": "JavaScript Description"  
16- },  
17- {
```

javabrains.io

Runner Import Builder Team Library SYNC OFF Sign In

Filter History Collections

No Environment

Save to collection

DELETE http://localhost:8080/topics/javaee Params Send Save

Authorization Headers (1) Body Pre-request Script Tests Code

Content-Type application/json

key value

Body Cookies Headers (3) Tests Status: 200 OK Time: 12 ms

Bulk Edit Presets

Pretty Raw Preview JSON

```
1- [  
2- {  
3- "id": "spring",  
4- "name": "Spring Framework",  
5- "description": "Spring Framework Description"  
6- },  
7- {  
8- "id": "java",  
9- "name": "Core Java",  
10- "description": "Core Java Description"  
11- },  
12- {  
13- "id": "javascript",  
14- "name": "JavaScript",  
15- "description": "JavaScript Description"  
16- },  
17- {
```

December 8

POST http://localhost:8080/topics  
POST http://localhost:8080/topics  
POST http://localhost:8080/topics  
GET http://localhost:8080/topics/java  
POST http://localhost:8080/topics  
GET http://localhost:8080/topics/spring  
GET http://localhost:8080/topics

Servers local

javabrains.io

Builder Team Library

Runner Import

No Environment

Sync Off

Sign In

Filter

History Collections

Save to collection

Today

- DEL http://localhost:8080/topics/javaeee
- GET http://localhost:8080/topics
- POST http://localhost:8080/topics
- PUT http://localhost:8080/topics/javascript

December 8

- POST http://localhost:8080/topics
- POST http://localhost:8080/topics
- POST http://localhost:8080/topics
- GET http://localhost:8080/topics/java
- POST http://localhost:8080/topics
- GET http://localhost:8080/topics/spring
- GET http://localhost:8080/topics

Type tags to

Servers local

DELETE http://localhost:8080/topics/javaeee

Params Send Save

Code

Authorization Headers (1) Body Pre-request Script Tests

Content-Type application/json

key value

Body Cookies Headers (2) Tests

Pretty Raw Preview Text

Status: 200 OK Time: 15 ms

Presets Bulk Edit

javabrains.io

Runner Import

Builder Team Library

SYNC OFF Sign In

No Environment

Filter History Collections

Save to collection

Today

- GET http://localhost:8080/topics
- DEL http://localhost:8080/topics/javaee
- POST http://localhost:8080/topics
- PUT http://localhost:8080/topics/javascript

December 8

- POST http://localhost:8080/topics
- POST http://localhost:8080/topics
- POST http://localhost:8080/topics
- GET http://localhost:8080/topics/java
- POST http://localhost:8080/topics
- GET http://localhost:8080/topics/spring
- GET http://localhost:8080/topics

Type tags to

▶ local

http://localhost:8080/

GET http://localhost:8080/topics

Params Send Save

Body Cookies Headers (3) Tests Status: 200 OK Time: 11 ms

Pretty Raw Preview JSON

```
1. [
2.   {
3.     "id": "spring",
4.     "name": "Spring Framework",
5.     "description": "Spring Framework Description"
6.   },
7.   {
8.     "id": "java",
9.     "name": "Core Java",
10.    "description": "Core Java Description"
11.   },
12.   {
13.     "id": "javascript",
14.     "name": "JavaScript",
15.     "description": "JavaScript Description"
16.   }
17. ]
```

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Builder Team Library

Sync OFF

Sign In

Filter

History Collections

No Environment

Save to collection

DELETE http://localhost:8080/topics/javascript

Content-Type: http://localhost:8080/topics/javascript

Params Send Save

Today

GET http://localhost:8080/topics

DEL http://localhost:8080/topics/javaee

POST http://localhost:8080/topics

PUT http://localhost:8080/topics/javascript

December 8

POST http://localhost:8080/topics

POST http://localhost:8080/topics

POST http://localhost:8080/topics

GET http://localhost:8080/topics/java

POST http://localhost:8080/topics

GET http://localhost:8080/topics/spring

GET http://localhost:8080/topics

Hit the Send button to get a response.

Servers

Type tags to

local

javabrains.io

Package Explorer course-a Servers

Runner Import

Builder Team Library Sync OFF Sign In

Filter History Collections

Save to collection

Today

- GET http://localhost:8080/topics
- DEL http://localhost:8080/topics/javascript
- DEL http://localhost:8080/topics/javaee
- POST http://localhost:8080/topics
- PUT http://localhost:8080/topics/javascript

December 8

- POST http://localhost:8080/topics
- POST http://localhost:8080/topics
- POST http://localhost:8080/topics
- GET http://localhost:8080/topics/java
- POST http://localhost:8080/topics
- GET http://localhost:8080/topics/spring
- GET http://localhost:8080/topics

Type tags to filter

local

http://localhost:8080/

GET http://localhost:8080/topics

Content-Type application/json

key value

Body Cookies Headers (3) Tests Status: 200 OK Time: 14 ms

Pretty Raw Preview JSON

```
1+ [  
2+   {  
3+     "id": "spring",  
4+     "name": "Spring Framework",  
5+     "description": "Spring Framework Description"  
6+   },  
7+   {  
8+     "id": "java",  
9+     "name": "Core Java",  
10+    "description": "Core Java Description"  
11+  }  
12 ]
```