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1  =====pom.xml=====
2  <?xml version="1.0" encoding="UTF-8"?>
3  <project xmlns="http://maven.apache.org/POM/4.0.0"
4  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
5  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
6  https://maven.apache.org/xsd/maven-4.0.0.xsd">
7  <modelVersion>4.0.0</modelVersion>
8  <parent>
9  <groupId>org.springframework.boot</groupId>
10 <artifactId>spring-boot-starter-parent</artifactId>
11 <version>2.3.0.RELEASE</version>
12 <relativePath/> <!-- lookup parent from repository -->
13 </parent>
14 <groupId>com.ameya</groupId>
15 <artifactId>001_1-course-api</artifactId>
16 <version>0.0.1-SNAPSHOT</version>
17 <name>001_1-course-api</name>
18 <description>Demo project for Spring Boot</description>
19 <properties>
20 <java.version>1.8</java.version>
21 </properties>
22 <dependencies>
23 <dependency>
24 <groupId>org.springframework.boot</groupId>
25 <artifactId>spring-boot-starter-web</artifactId>
26 </dependency>
27
28 <dependency>
29 <groupId>org.springframework.boot</groupId>
30 <artifactId>spring-boot-starter-test</artifactId>
31 <scope>test</scope>
32 <exclusions>
33 <exclusion>
34 <groupId>org.junit.vintage</groupId>
35 <artifactId>junit-vintage-engine</artifactId>
36 </exclusion>
37 </exclusions>
38 </dependency>
39 </dependencies>
40
41 <build>
42 <plugins>
43 <plugin>
44 <groupId>org.springframework.boot</groupId>
45 <artifactId>spring-boot-maven-plugin</artifactId>
46 </plugin>
47 </plugins>
48 </build>
49 </project>
50 =====application.properties=====
51 server.port=9001
52 logging.level.web= trace
53 =====HelloWorldController.java=====
54 package com.ameya.controllers;
55
56 import org.springframework.web.bind.annotation.RequestMapping;
57 import org.springframework.web.bind.annotation.RestController;
58
59 @RequestMapping("/helloworld")
60 @RestController
61 public class HelloWorldController {
62
63     @RequestMapping("/greet")
64     public String greetUser() {
65         return "Hello .... Welcome To Spring Boot";
66     }
67 }
68 =====Topic.java=====
69 package com.ameya.models;
70
71 public class Topic {
72     private String id;

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72     private String topicName;
73     private String topicDescription;
74     public Topic() {
75
76     }
77     public Topic(String id, String topicName, String topicDescription) {
78         this.id = id;
79         this.topicName = topicName;
80         this.topicDescription = topicDescription;
81     }
82     public String getId() {
83         return id;
84     }
85     public void setId(String id) {
86         this.id = id;
87     }
88     public String getTopicName() {
89         return topicName;
90     }
91     public void setTopicName(String topicName) {
92         this.topicName = topicName;
93     }
94     public String getTopicDescription() {
95         return topicDescription;
96     }
97     public void setTopicDescription(String topicDescription) {
98         this.topicDescription = topicDescription;
99     }
100
101
102 }
103 =====TopicService.java=====
104 package com.ameya.services;
105
106 import java.util.List;
107
108 import com.ameya.models.Topic;
109
110 public interface TopicService {
111     List<Topic> getAllTopics();
112     void addTopic(Topic topic);
113     void updateTopic(String id, Topic topic);
114     Topic getTopic(String id);
115     void deleteTopic(String id);
116 }
117 =====TopicServiceImpl.java=====
118 package com.ameya.services.impl;
119
120 import java.util.ArrayList;
121 import java.util.Arrays;
122 import java.util.List;
123
124 import org.springframework.stereotype.Service;
125
126 import com.ameya.models.Topic;
127 import com.ameya.services.TopicService;
128
129 @Service
130 public class TopicServiceImpl implements TopicService{
131     private List<Topic> topics=new ArrayList<>(Arrays.asList(
132         new Topic("T001","Spring Framework","A Short Introduction To Spring
           Framework"),
133         new Topic("T002","Java 8","A Short Introduction To Java Programming"),
134         new Topic("T003","Advanced Spring","A 3 Day Advanced Spring Framework
           Course"),
135         new Topic("T004","JavaEE","A Short Introduction To Java Enterprise
           Edition")
136     ));
137
138     @Override
139     public List<Topic> getAllTopics() {
140         return topics;
141     }

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142
143     @Override
144     public void addTopic(Topic topic) {
145         topics.add(topic);
146
147     }
148
149     @Override
150     public void updateTopic(String id, Topic topic) {
151         for(int indx=0;indx<topics.size();indx++) {
152             Topic t=(Topic)topics.get(indx);
153             if(t.getId().equalsIgnoreCase(id)) {
154                 topics.set(indx, topic);
155                 return;
156             }
157         }
158
159     }
160
161     @Override
162     public Topic getTopic(String id) {
163         Topic topic=null;
164         for(int indx=0;indx<topics.size();indx++) {
165             Topic t=(Topic)topics.get(indx);
166             if(t.getId().equalsIgnoreCase(id)) {
167                 topic=t;
168                 break;
169             }
170         }
171         return topic;
172     }
173
174     @Override
175     public void deleteTopic(String id) {
176         for(int indx=0;indx<topics.size();indx++) {
177             Topic t=(Topic)topics.get(indx);
178             if(t.getId().equalsIgnoreCase(id)) {
179                 topics.remove(indx);
180                 return;
181             }
182         }
183
184     }
185
186 }
187 =====TopicController.java=====
=====
188 package com.ameya.controllers;
189
190 import java.util.List;
191
192 import org.springframework.beans.factory.annotation.Autowired;
193 import org.springframework.web.bind.annotation.DeleteMapping;
194 import org.springframework.web.bind.annotation.GetMapping;
195 import org.springframework.web.bind.annotation.PathVariable;
196 import org.springframework.web.bind.annotation.PostMapping;
197 import org.springframework.web.bind.annotation.PutMapping;
198 import org.springframework.web.bind.annotation.RequestBody;
199 import org.springframework.web.bind.annotation.RestController;
200
201 import com.ameya.models.Topic;
202 import com.ameya.services.TopicService;
203
204 @RestController
205 public class TopicController {
206     @Autowired
207     private TopicService topicService;
208
209     @GetMapping(path="/topics")
210     public List<Topic> findAll(){
211         return topicService.getAllTopics();
212     }
213     @GetMapping(path="/topics/{id}")

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214     public Topic findById(@PathVariable("id") String id) {
215         return topicService.getTopic(id);
216     }
217     @PostMapping(path="/topics/create")
218     public void create(@RequestBody Topic topic) {
219         topicService.addTopic(topic);
220     }
221     @PutMapping(path="/topics/update/{id}")
222     public void modify(@PathVariable("id") String id,@RequestBody Topic topic) {
223         topicService.updateTopic(id, topic);
224     }
225     @DeleteMapping(path="/topics/delete/{id}")
226     public void delete(@PathVariable("id") String id) {
227         topicService.deleteTopic(id);
228     }
229 }
230 =====
231
232 Get Topic By Id => http://localhost:9001/topics/T003
233 Get All Topics => http://localhost:9001/topics
234 Add Topic => http://localhost:9001/topics/create
235 {
236     "id": "T005",
237     "topicName": "SpringBoot",
238     "topicDescription": "A Short Introduction To Spring Boot !"
239 }
240 Update Topic => http://localhost:9001/topics/update/T002
241
242 Body same as above
243
244 Delete => http://localhost:9001/topics/delete/T004

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