

Project ▾

Students F:\Domashki\DZ14\Students

> .idea

> .mvn

> src

> main

> test

java

ru.natali.students

componenttest

StudentControllerTest

config

TestConfig

controller

StudentControllerTest

repository

StudentRepositoryTest

service

StudentServiceTest

StudentsApplicationTests

resources

application-test.properties

data.sql

schema.sql

.gitattributes

.gitignore

HELP.md

mvnw

data.sql

StudentServiceTest.java

application-test.properties

StudentController.java

StudentService.java

StudentControllerTest.java

pom.xml (students)

```
26 public class StudentControllerTest {
84     @Test
85     public void testUpdateStudent() throws Exception {
86         Student updatedStudent = new Student(id: 1L, fullName: "Иван Иванов", email: "ivan@example.com", Arrays.asList("Математика", "Физика", "Химия"));
87
88         when(studentService.findById(1L)).thenReturn(Optional.of(updatedStudent));
89         when(studentService.update(any(Student.class))).thenReturn(updatedStudent);
90
91         mockMvc.perform(put(uriTemplate: "/api/students/1")
92             .contentType(MediaType.APPLICATION_JSON)
93             .content("{\"fullName\":\"Иван Иванов\",\"email\":\"ivan@example.com\",\"courses\":[\"Математика\",\"Физика\",\"Химия\"]}"))
94             .andExpect(status().isOk())
95             .andExpect(jsonPath(expression: "$.courses.length()").value(expectedValue: 3));
96     }
97
98     @Test
99     public void testDeleteStudent() throws Exception {
100         doNothing().when(studentService).deleteById(1L);
101
102         mockMvc.perform(delete(uriTemplate: "/api/students/1")
103             .contentType(MediaType.APPLICATION_JSON))
104             .andExpect(status().isNoContent());
105
106         verify(studentService, times(wantedNumberOfInvocations: 1)).deleteById(1L);
107     }
108
109     @Test
```

Run StudentControllerTest

StudentControllerTest (ru.nat: 1 sec 601 ms)

testUpdateStudent() 1 sec 529 ms

testStudentNotFound() 23 ms

testDeleteStudent() 14 ms

testGetAllStudents() 12 ms

testGetStudentById() 10 ms

testAddNewStudent() 13 ms

Tests passed: 6 of 6 tests - 1 sec 601 ms

```
21:18:09.193 [main] INFO org.springframework.test.web.servlet.TestDispatcherServlet -- Initializing Servlet ''
21:18:09.195 [main] INFO org.springframework.test.web.servlet.TestDispatcherServlet -- Completed initialization in 1 ms
21:18:09.392 [main] INFO org.springframework.mock.web.MockServletContext -- Initializing Spring TestDispatcherServlet ''
21:18:09.392 [main] INFO org.springframework.test.web.servlet.TestDispatcherServlet -- Initializing Servlet ''
21:18:09.392 [main] INFO org.springframework.test.web.servlet.TestDispatcherServlet -- Completed initialization in 0 ms
21:18:09.414 [main] INFO org.springframework.mock.web.MockServletContext -- Initializing Spring TestDispatcherServlet ''
21:18:09.414 [main] INFO org.springframework.test.web.servlet.TestDispatcherServlet -- Initializing Servlet ''
```

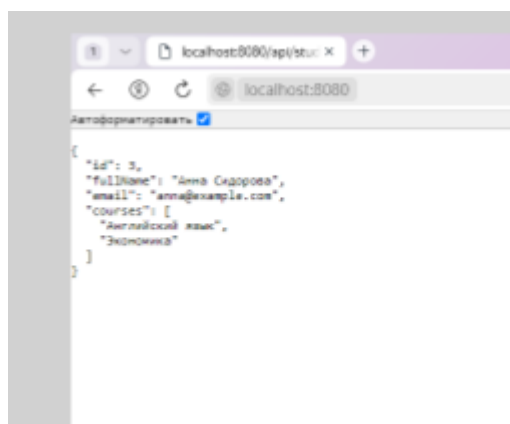
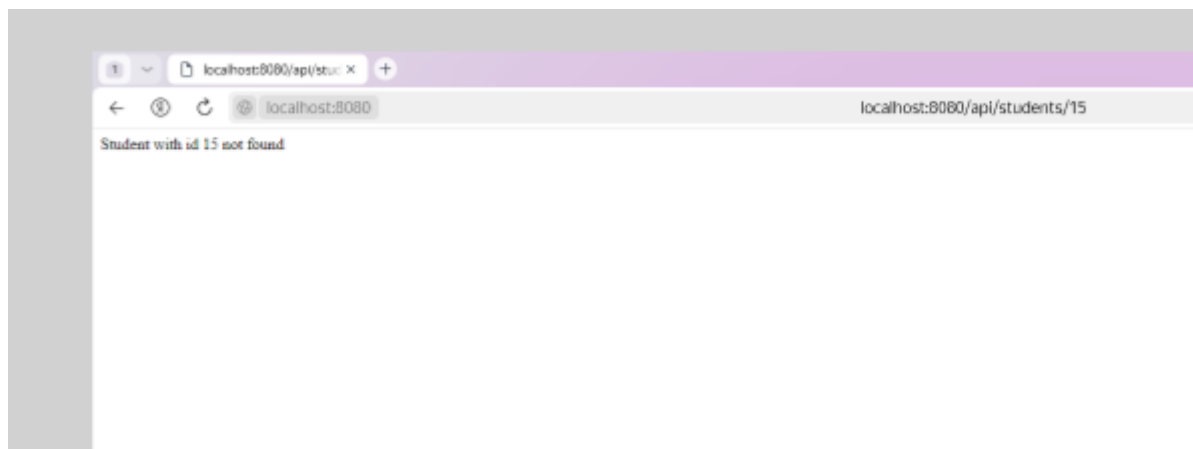
localhost:8080/api/stu x

localhost:8080

Автотормозить ☒

```
[
  {
    "id": 1,
    "fullName": "Иван Иванов",
    "email": "ivan@example.com",
    "courses": [
      "Математика",
      "Физика"
    ]
  },
  {
    "id": 2,
    "fullName": "Петр Петров",
    "email": "petr@example.com",
    "courses": [
      "Программирование",
      "История"
    ]
  },
  {
    "id": 3,
    "fullName": "Анна Сидорова",
    "email": "anna@example.com",
    "courses": [
      "Английский язык",
      "Экономика"
    ]
  },
  {
    "id": 4,
    "fullName": "Алексей Смирнов",
    "email": "alexey@example.com",
    "courses": [
      "Русский язык",
      "Литература"
    ]
  },
  {
    "id": 5,
    "fullName": "Ольга Васильева",
    "email": "olga@example.com",
    "courses": [
      "Химия",
      "Биология"
    ]
  },
  {
    "id": 6,
    "fullName": "Сергей Кузнецов",
    "email": "sergey@example.com",
    "courses": [
      "Информатика",
      "Физическая культура"
    ]
  }
]
```

PC  
Облачно



Project ▾

ru.natali.students

controller

exception

model

repository

service

resources

test

ru.natali.students

componenttest

config

controller

repository

service

StudentServiceTest

StudentsApplicationTests

Student.java

schema.sql

data.sql

StudentServiceTest.java ×

application-test.properties

StudentController.java

StudentServiceTest.java

```
7 import java.util.List;
8 import java.util.Optional;
9
10 import org.junit.jupiter.api.BeforeEach;
11 import org.junit.jupiter.api.Test;
12 import org.mockito.InjectMocks;
13 import org.mockito.Mock;
14 import org.mockito.MockitoAnnotations;
15 import ru.natali.students.model.Student;
16 import ru.natali.students.repository.StudentRepository;
17
18 class StudentServiceTest {
19
20     @InjectMocks 7 usages
21     private StudentService studentService;
22
23     @Mock 8 usages
24     private StudentRepository studentRepository;
25
26     @BeforeEach
27     void setup() { MockitoAnnotations.openMocks(this); }
28
29
30
31     @Test
32     void testGetAllStudents() {
33         // Arrange
34         List<Student> expectedStudents = Arrays.asList(
35             new Student(1, "John", "Doe", "john.doe@example.com"),
36             new Student(2, "Jane", "Doe", "jane.doe@example.com"),
37             new Student(3, "Bob", "Doe", "bob.doe@example.com"),
38             new Student(4, "Alice", "Doe", "alice.doe@example.com"),
39             new Student(5, "Charlie", "Doe", "charlie.doe@example.com")
40         );
41
42         // Act
43         List<Student> actualStudents = studentService.getAllStudents();
44
45         // Assert
46         assertEquals("Expected 5 students", expectedStudents, actualStudents);
47     }
48 }
```

Run

StudentsApplication × StudentServiceTest ×

✓ StudentServiceTest (ru.natali.stude 853 ms)

✓ testSave() 811 ms

✓ testFindByld\_Found() 5 ms

✓ testGetAllStudents() 2 ms

✓ testUpdate\_NonExistingStudent() 9 ms

✓ testDeleteByld() 20 ms

✓ testFindByld\_NotFound() 3 ms

✓ testUpdate\_ExistingStudent() 3 ms

Tests passed: 7 of 7 tests - 853 ms

C:\Users\natali\.jdk\jdk-21\bin\java.exe ...

Mockito is currently self-attaching to enable the inline-mock-maker. This will no longer work in future releases of the JDK. Please add Mockito as a dependency to your project, what is described in Mockito's documentation: <https://javadoc.io/doc/org.mockito/mockito-core/latest/org/mockito/Mockito.html#0.3>

WARNING: A Java agent has been loaded dynamically (C:\Users\natali\.m2\repository\net\bytebuddy\byte-buddy-agent\1.15.11\byte-buddy-agent-1.15.11.jar). Please see https://www.oracle.com/technetwork/java/javase/8-releases-jsp-2176271.html for more details.

WARNING: If a serviceability tool is in use, please run with -XX:+EnableDynamicAgentLoading to hide this warning

WARNING: If a serviceability tool is not in use, please run with -Djdk.instrument.traceUsage for more information

WARNING: Dynamic loading of agents will be disallowed by default in a future release

Open JDK 64-Bit Server VM warning: Shaping is only supported for boot loader classes because bootstrap classpath has been appended