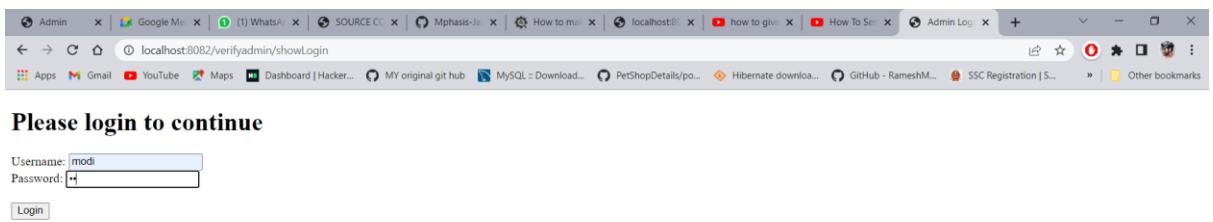
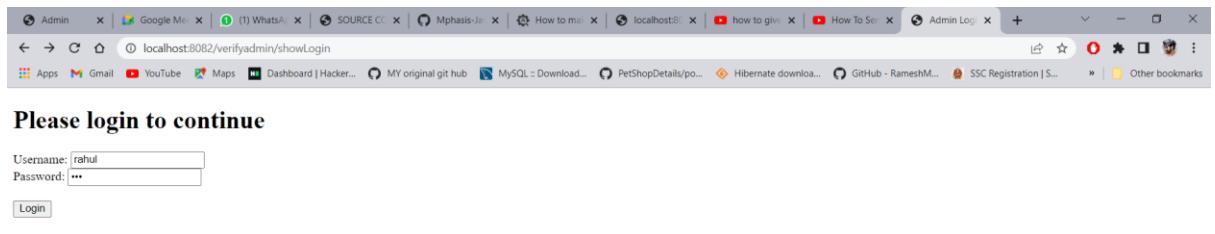
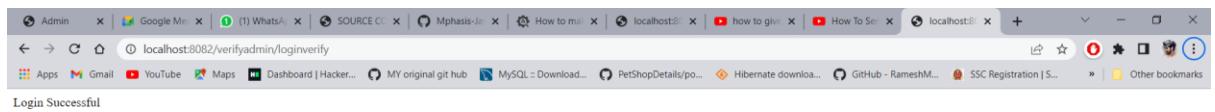


Online Quiz Portal App

1. Here I created Two applications(1.Quiz ,2.QuizUser).
2. I made the connection for the two Microservices.

Screenshots of The 1.Quiz:





Admin Google Mail SOURCE CC Mphasis-Java How to mail localhost:8082 how to give localhost:8082 How To See localhost:8082

localhost:8082/verifyadmin/loginverify

Admin with Username: rahul password ghh not found.

My Workspace

No APIs yet

localhost:8082/admin

GET localhost:8082/admin

Params Authorization Headers (9) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON

quizname: "Test2"

Body Cookies (1) Headers (5) Test Results

Pretty Raw Preview Visualize JSON

1 {
2 "adminid": 1,
3 "adminname": "modi",
4 "password": "pm"
5 },
6 {
7 "adminid": 2,
8 "adminname": "amit",
9 "password": "mp"
10 }
11
12

Status: 200 OK Time: 32 ms Size: 263 B Save Response

Start working with APIs 67% Next: Save a request. Show me

Online Find and Replace Console Cookies Capture requests Bootcamp Runner Trash

The screenshot shows the Postman application interface. On the left, the sidebar includes sections for Collections, APIs (selected), Environments, Mock Servers, Monitors, Flows, and History. The main workspace displays a placeholder icon with the text "No APIs yet". A central panel shows a POST request to "localhost:8082/question". The "Body" tab is selected, showing the following JSON payload:

```
1
2   {
3     "ques": "how many days are there in may month?"
4   }
```

The response pane indicates a successful 200 OK status with a response size of 220 B. The response body is:

```
1
2   {
3     "ques": "how many days are there in may month?",
4     "id": 11
5   }
```

This screenshot shows the same Postman interface as the previous one, but with a different request configuration. It displays a GET request to "localhost:8082/question". The "Body" tab is selected, showing the same JSON payload as the previous screenshot:

```
1
2   {
3     "ques": "how many days are there in may month?"
4   }
```

The response pane indicates a successful 200 OK status with a response size of 646 B. The response body is identical to the previous screenshot:

```
1
2   {
3     "ques": "how many days are there in may month?",
4     "id": 11
5   }
```

MySQL Workbench

Local instance MySQL80 ×

File Edit View Query Database Server Tools Help

Navigator: Schemas

myquizportal

Tables

Views

Stored Procedures

Functions

Score_Comparers

user

Quizportals

sys

triggers

Information: Schema: myquizportal

SQL File 8* SQL File 13* SQL File 16* SQL File 17* SQL File 17* SQL File 11* SQL File 12* SQL File 13 SQL File 14* myquizportal - Schema SQL File 13* SQL Additions

Automatic context help is disabled. Use the toolbar or manually get help for the current caret position or to toggle automatic help.

Result Grid | Filter Rows: Limit to 1000 rows | SQL Editor | Export/Import | Wrap Cell Content: 13

quesid ques

1 how many days in a week?

2 how many days in a leap year?

3 how many days in january?

4 how many days in march?

5 how many days in non leap year?

6 how many days in 2022?

7 is >= 5?

8 is >= 6?

9 opposite of happy?

10 how letters are there in english alphabets?

11 how many days are there in may month?

Output: Action Output

Time Action Message Duration / Fetch

25 00:04:20 select * from myquizportal.questions LIMIT 0, 1000 11 row(s) returned 0.000 sec / 0.000 sec

26 00:04:43 select * from myquizportal.questions LIMIT 0, 1000 11 row(s) returned 0.000 sec / 0.000 sec

Home Workspaces API Network Explore

My Workspace

Collections

APIs

No APIs yet

APIs define related collections and environments under a consistent schema.

Create an API

localhost:8082/answer

POST localhost:8082/answer

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies Beautify

Body

```
1 ... "ans": "31",
2 ...
3 ...
4 ... "ques_id": 3
```

Body Cookies Headers (5) Test Results

Pretty Raw Preview Visualize JSON

Status: 200 OK Time: 24 ms Size: 183 B Save Response

Start working with APIs 67%

Next: Save a request. Show me

Online Find and Replace Console

Cookies Capture requests Bootcamp Runner Trash

Home Workspaces API Network Explore

My Workspace New Import

localhost:8082/answer

GET localhost:8082/answer

Params Authorization Headers (9) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1
2   ...
3   ...
4   ...
```

Body Cookies (1) Headers (5) Test Results

Pretty Raw Preview Visualize JSON

```
1
2   ...
3   ...
4   ...
5   ...
6   ...
7   ...
8   ...
9   ...
10  ...
11  ...
12  ...
13  ...
```

Status: 200 OK Time: 7 ms Size: 229 B Save Response

Start working with APIs 67% Next: Save a request. Show me

Online Find and Replace Console

Home Workspaces API Network Explore

My Workspace New Import

localhost:8082/quiz

POST localhost:8082/quiz

Params Authorization Headers (9) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1
2   ...
3   ...
```

Body Cookies (1) Headers (5) Test Results

Pretty Raw Preview Visualize JSON

```
1
2   ...
3   ...
4   ...
```

Status: 200 OK Time: 18 ms Size: 195 B Save Response

Start working with APIs 67% Next: Save a request. Show me

Online Find and Replace Console

≡ Home Workspaces API Network Explore

Search Postman

Invite 🌐 🔍 🚨 🌐 Upgrade

My Workspace

Collections +

APIs

No APIs yet

APIs define related collections and environments under a consistent schema.

Create an API

localhost:8082/quiz

GET localhost:8082/quiz

Params Authorization Headers (9) Body Pre-request Script Tests Settings

Body

```
1 ...
2 ...
3 ... "quizname": "test3"
```

Send Cookies Beautify

Body Cookies (1) Headers (5) Test Results

Pretty Raw Preview Visualize JSON

```
1 [
2   {
3     "quizid": 1,
4     "quizname": "Test1"
5   },
6   {
7     "quizid": 2,
8     "quizname": "Test2"
9   },
10  {
11    "quizid": 3,
12    "quizname": "test3"
13  }
]
```

Status: 200 OK Time: 10 ms Size: 261 B Save Response

Start working with APIs

67% Next: Save a request. Show me

Online Find and Replace Console

Cookies Capture requests Bootcamp Runner Trash

```
1 [
2   {
3     "quizid": 1,
4     "quizname": "Test1"
5   },
6   {
7     "quizid": 2,
8     "quizname": "Test2"
9   },
10  {
11    "quizid": 3,
12    "quizname": "test3"
13  }
]
```

Below is the 1.Quiz app Code structure & code screenshots

springboot - Quiz/src/main/java/com/project/quiz/controller/QuestionController.java - Spring Tool Suite 4

```

File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer JUnit
demo [boot]
Handling-User-Authentication [boot] [devtools]
OnlineQuiz [boot]
productservice [boot]
Quiz [boot] [devtools]
src/main/java
  com.project.quiz
    QuizApplication.java
    com.projectquiz.controller
      AdminController.java
      AdminExceptionController.java
      AdminVerifyController.java
      AnswerController.java
      QuestionController.java
      QuestionExceptionController.java
      QuizController.java
      QuizExceptionController.java
    com.projectquiz.entity
      Admin.java
      Answer.java
      Questions.java
      Quiz.java
    com.projectquiz.exceptions
    com.projectquiz.Repository
  src/main/resources
    static
    templates
    application.properties
src/test/java
JRE System Library [JavaSE-17]
Maven Dependencies
src
target
HELP.md
mvnw
mvnw.cmd
pom.xml

```

springboot - Quiz/src/main/java/com/project/quiz/controller/AdminVerifyController.java - Spring Tool Suite 4

```

File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer JUnit
demo [boot]
Handling-User-Authentication [boot] [devtools]
OnlineQuiz [boot]
productservice [boot]
Quiz [boot] [devtools]
src/main/java
  com.project.quiz
    QuizApplication.java
    com.projectquiz.controller
      AdminController.java
      AdminExceptionController.java
      AdminVerifyController.java
      AnswerController.java
      QuestionController.java
      QuestionExceptionController.java
      QuizController.java
      QuizExceptionController.java
    com.projectquiz.entity
      Admin.java
      Answer.java
      Questions.java
      Quiz.java
    com.projectquiz.exceptions
    com.projectquiz.Repository
  src/main/resources
    static
    templates
    application.properties
src/test/java
JRE System Library [JavaSE-17]
Maven Dependencies
src
target
HELP.md
mvnw
mvnw.cmd
pom.xml

```

QuizApplication [Java Application] [pid: 1336]

```

select
  quiz0_.quizid as quizidi_3_

```

springboot - Quiz/src/main/java/com/project/quiz/controller/AdminExceptionController.java - Spring Tool Suite 4

```

1 package com.project.quiz.controller;
2
3 import org.springframework.http.HttpStatus;
4
5 @ControllerAdvice
6 public class AdminExceptionController {
7
8     @ExceptionHandler(value = AdminNotFoundException.class)
9     public ResponseEntity<Object> handleException(AdminNotFoundException ex) {
10         return new ResponseEntity<Object>(ex.getMessage(), HttpStatus.NOT_FOUND);
11     }
12
13 }
14
15
16
17
18 }
19

```

Project Explorer JUnit

src/main/java

- com.project.quiz
 - QuizApplication.java
 - com.project.quiz.controller
 - AdminController.java
 - AdminExceptionController.java
 - AdminVerifyController.java
 - AnswerController.java
 - QuestionController.java
 - QuestionExceptionController.java
 - QuizController.java
 - QuizExceptionController.java
 - com.project.quiz.entity
 - Admin.java
 - Answer.java
 - Questions.java
 - Quiz.java
 - com.project.quiz.exceptions
 - com.project.quiz.Repository
- static
- templates
- application.properties

src/test/java

JRE System Library [JavaSE-17]

Maven Dependencies

src

target

HELP.mnd

maven

maven.cmd

pom.xml

com.project.quiz

springboot - Quiz/src/main/java/com/project/quiz/controller/AdminController.java - Spring Tool Suite 4

```

18
19 @RestController
20 @RequestMapping("admin")
21 public class AdminController {
22
23     @Autowired
24     AdminRepository adminrepo;
25
26     @GetMapping
27     public Iterable<Admin> getAdmin() {
28         return adminrepo.findAll();
29     }
30
31     @GetMapping("/{id}")
32     public Admin getAdmin(@PathVariable("id") Integer id) {
33         Optional<Admin> opt = adminrepo.findById(id);
34         if (opt.isEmpty()) {
35             throw new AdminNotFoundException(id);
36         }
37         return opt.get();
38     }
39
40     @PostMapping
41     public Admin create(@RequestBody Admin admin) {
42         return adminrepo.save(admin);
43     }
44
45     @PutMapping
46     public Admin update(@RequestBody Admin admin) {
47         return adminrepo.save(admin);
48     }
49
50     @DeleteMapping("/{id}")
51     public void delete(@PathVariable("id") Integer id) {
52         adminrepo.deleteById(id);
53     }
54 }

```

Project Explorer JUnit

src/main/java

- com.project.quiz
 - QuizApplication.java
 - com.project.quiz.controller
 - AdminController.java
 - AdminExceptionController.java
 - AdminVerifyController.java
 - AnswerController.java
 - QuestionController.java
 - QuestionExceptionController.java
 - QuizController.java
 - QuizExceptionController.java
 - com.project.quiz.entity
 - Admin.java
 - Answer.java
 - Questions.java
 - Quiz.java
 - com.project.quiz.exceptions
 - com.project.quiz.Repository
- static
- templates
- application.properties

src/test/java

JRE System Library [JavaSE-17]

Maven Dependencies

src

target

HELP.mnd

maven

maven.cmd

pom.xml

com.project.quiz

springboot - Quiz/src/main/java/com/project/quiz/QuizApplication.java - Spring Tool Suite 4

```

1 package com.project.quiz;
2
3 import org.springframework.boot.SpringApplication;
4
5 @SpringBootApplication
6 public class QuizApplication {
7
8     public static void main(String[] args) {
9         SpringApplication.run(QuizApplication.class, args);
10    }
11
12 }
13
14

```

Project Explorer JUnit

src/main/java

- com.project.quiz
 - QuizApplication.java
 - com.project.quiz.controller
 - AdminController.java
 - AdminExceptionController.java
 - AdminVerifyController.java
 - AnswerController.java
 - QuestionController.java
 - QuestionExceptionController.java
 - QuizController.java
 - QuizExceptionController.java
 - com.project.quiz.entity
 - Admin.java
 - Answer.java
 - Questions.java
 - Quiz.java
 - com.project.quiz.exceptions
 - com.project.quiz.Repository
- static
- templates
- application.properties

src/test/java

JRE System Library [JavaSE-17]

Maven Dependencies

src

target

HELP.mnd

maven

maven.cmd

pom.xml

com.project.quiz

springboot - Quiz/pom.xml - Spring Tool Suite 4

```

<project>
    <parent>
        <groupId>org.springframework.boot</groupId>
        <artifactId>spring-boot-starter-data-jpa</artifactId>
    </parent>
    <groupId>com.example</groupId>
    <artifactId>Quiz</artifactId>
    <version>0.0.1-SNAPSHOT</version>
    <dependencies>
        <dependency>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-starter-web</artifactId>
        </dependency>
        <dependency>
            <groupId>org.apache.tomcat.embed</groupId>
            <artifactId>tomcat-embed-jasper</artifactId>
            <version>9.0.44</version>
            <scope>provided</scope>
        </dependency>
        <dependency>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-starter-tomcat</artifactId>
            <version>2.4.4</version>
            <scope>provided</scope>
        </dependency>
        <dependency>
            <groupId>javax.servlet</groupId>
            <artifactId>jstl</artifactId>
            <version>1.2</version>
        </dependency>
        <dependency>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-starter-validation</artifactId>
            <version>1.1.2</version>
        </dependency>
        <dependency>
            <groupId>mysql</groupId>
            <artifactId>mysql-connector-java</artifactId>
            <version>8.0.23</version>
        </dependency>
    </dependencies>
    <build>
        <plugins>
            <plugin>
                <groupId>org.springframework.boot</groupId>
                <artifactId>spring-boot-maven-plugin</artifactId>
            </plugin>
        </plugins>
    </build>

```

springboot - Quiz/src/main/resources/application.properties - Spring Tool Suite 4

```

server.port=8082
spring.datasource.url=jdbc:mysql://localhost:3306/myquizportal
spring.datasource.username=root
spring.datasource.password=Veda@1202189
spring.jpa.properties.hibernate.show_sql=true
spring.jpa.properties.hibernate.format_sql=true
spring.jpa.hibernate.ddl-auto=update
spring.mvc.view.prefix=/WEB-INF/views/
spring.mvc.view.suffix=.jsp
logging.level.org.hibernate.SQL=INFO
logging.level.org.hibernate.type.descriptor.sql.BasicBinder=TRACE
logging.level.org.springframework=INFO
#logging.level.org.apache=ERROR
logging.level.org.springframework.web=TRACE

```

springboot - Quiz/src/main/java/com/project/quiz/Repository/QuizRepository.java - Spring Tool Suite 4

```

package com.project.quiz.Repository;

import org.springframework.data.repository.CrudRepository;
public interface QuizRepository extends CrudRepository<Quiz, Integer> {
}

```

springboot - Quiz/src/main/java/com/project/quiz/Repository/QuestionRepository.java - Spring Tool Suite 4

```

1 package com.project.quiz.Repository;
2
3 import org.springframework.data.repository.CrudRepository;
4
5 public interface QuestionRepository extends CrudRepository<Questions, Integer> {
6
7 }
8
9 }
10

```

springboot - Quiz/src/main/java/com/project/quiz/Repository/AnswerRepository.java - Spring Tool Suite 4

```

1 package com.project.quiz.Repository;
2
3 import org.springframework.data.repository.CrudRepository;
4
5 public interface AnswerRepository extends CrudRepository<Answer, Integer> {
6
7 }
8
9 }
10

```

springboot - Quiz/src/main/java/com/project/quiz/Repository/AdminRepository.java - Spring Tool Suite 4

```

1 package com.project.quiz.Repository;
2
3 import java.util.Optional;
4
5 public interface AdminRepository extends CrudRepository<Admin, Integer> {
6
7     Optional<Admin> findByAdminNameAndPassword(String name, String password);
8
9 }
10

```

springboot - Quiz/src/main/java/com/project/quiz/exceptions/QuizNotFoundException.java - Spring Tool Suite 4

```

1 package com.project.quiz.exceptions;
2
3 public class QuizNotFoundException extends RuntimeException {
4
5     public QuizNotFoundException(int id) {
6         super("Quiz with id " + id + " not found.");
7     }
8
9 }
10
11

```

springboot - Quiz/src/main/java/com/project/quiz/exceptions/QuestionNotFoundException.java - Spring Tool Suite 4

```

1 package com.project.quiz.exceptions;
2
3 public class QuestionNotFoundException extends RuntimeException {
4
5     public QuestionNotFoundException(int id) {
6         super("Question with id " + id + " not found.");
7     }
8
9 }

```

springboot - Quiz/src/main/java/com/project/quiz/exceptions/AdminNotFoundException.java - Spring Tool Suite 4

```

1 package com.project.quiz.exceptions;
2
3 public class AdminNotFoundException extends RuntimeException {
4
5     public AdminNotFoundException(int id) {
6         super("Admin with id " + id + " not found.");
7     }
8
9
10     public AdminNotFoundException(String username, String password) {
11         super("Admin with Username: " + username + " password " + password + " not found.");
12     }
13 }

```

springboot - Quiz/src/main/java/com/project/quiz/entity/Quiz.java - Spring Tool Suite 4

```

package com.project.quiz.entity;
import javax.persistence.Entity;
import javax.persistence.Table(name="quiz");
public class Quiz {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int quizid;
    private String quizname;
    public int getQuizid() {
        return quizid;
    }
    public void setQuizid(int quizid) {
        this.quizid = quizid;
    }
    public String getQuizname() {
        return quizname;
    }
    public void setQuizname(String quizname) {
        this.quizname = quizname;
    }
    @Override
    public String toString() {
        return "Quiz [quizid=" + quizid + ", quizname=" + quizname + "]";
    }
}

```

springboot - Quiz/src/main/java/com/project/quiz/entity/Questions.java - Spring Tool Suite 4

```

package com.project.quiz.entity;
import java.util.HashSet;
import javax.persistence.Entity;
import javax.persistence.Table(name="questions");
public class Questions {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int quesid;
    private String ques;
    @OneToMany(mappedBy="ques", cascade = { CascadeType.ALL })
    private Set<Answer> answers = new HashSet<>();
    public int getQuesid() {
        return quesid;
    }
    public void setQuesid(int id) {
        this.quesid = id;
    }
    public String getQues() {
        return ques;
    }
    public void setQues(String ques) {
        this.ques = ques;
    }
    @Override
    public String toString() {
        return "Questions [id=" + quesid + ", ques=" + ques + ", answers=" + answers + "]";
    }
}

```

springboot - Quiz/src/main/java/com/project/quiz/entity/Answer.java - Spring Tool Suite 4

```

package com.project.quiz.entity;
private Questions ques;
    public Answer() {
        super();
    }
    public int getId() {
        return id;
    }
    public void setId(int id) {
        this.id = id;
    }
    public String getAns() {
        return ans;
    }
    public void setAns(String ans) {
        this.ans = ans;
    }
    public Questions getQues() {
        return ques;
    }
    public void setQues(Questions ques) {
        this.ques = ques;
    }
    @Override
    public String toString() {
        return "Answer [id=" + id + ", ans=" + ans + ", ques=" + ques + "]";
    }
}

```

The image displays three vertically stacked screenshots of the Eclipse IDE interface, each showing a different part of the Java application code.

Top Window: Shows the code for the `Admin` entity. The code defines a class `Admin` with fields `adminid`, `adminname`, and `password`. It includes methods for getting and setting these values.

```
1 package com.project.quiz.entity;
2
3 import javax.persistence.Entity;
4
5 @Entity
6 @Table(name="admin")
7 public class Admin {
8
9     @Id
10    @GeneratedValue(strategy = GenerationType.IDENTITY)
11    private int adminid;
12    private String adminname;
13    private String password;
14
15    public int getAdminid() {
16        return adminid;
17    }
18
19    public void setAdminid(int adminid) {
20        this.adminid = adminid;
21    }
22
23    public String getAdminname() {
24        return adminname;
25    }
26
27    public void setAdminname(String adminname) {
28        this.adminname = adminname;
29    }
30
31    public String getPassword() {
32        return password;
33    }
34
35    public void setPassword(String password) {
36        this.password = password;
37    }
38
39    public String toString() {
40        return "Admin{" +
41            "adminid=" + adminid +
42            ", adminname='" + adminname + '\'' +
43            ", password='" + password + '\''
44    }
45}
```

Middle Window: Shows the code for the `QuizExceptionController`. It contains an `@ExceptionHandler` annotation that handles `QuizNotFoundException` and returns a `HttpStatusCode.NOT_FOUND`.

```
1 package com.project.quiz.controller;
2
3 import org.springframework.http.HttpStatus;
4
5 @ControllerAdvice
6 public class QuizExceptionController {
7
8     @ExceptionHandler(value = QuizNotFoundException.class)
9     public ResponseEntity<Object> handleException(QuizNotFoundException ex) {
10         return new ResponseEntity<Object>(ex.getMessage(), HttpStatus.NOT_FOUND);
11     }
12 }
```

Bottom Window: Shows the code for the `QuizController`. It includes methods for listing quizzes, creating a new quiz, updating an existing quiz, and deleting a quiz by ID.

```
1 package com.project.quiz;
2
3 import com.project.quiz.entity.*;
4
5 @RestController
6 @RequestMapping("/quiz")
7 public class QuizController {
8
9     @Autowired
10    QuizRepository quizrepo;
11
12    @GetMapping
13    public Iterable<Quiz> getQuiz() {
14        return quizrepo.findAll();
15    }
16
17    @GetMapping("/{id}")
18    public Quiz getQuiz(@PathVariable("id") Integer id) {
19        Optional<Quiz> opt = quizrepo.findById(id);
20        if (opt.isEmpty()) {
21            throw new QuizNotFoundException(id);
22        }
23        return opt.get();
24    }
25
26    @PostMapping
27    public Quiz create(@RequestBody Quiz quiz) {
28        return quizrepo.save(quiz);
29    }
30
31    @PutMapping
32    public Quiz update(@RequestBody Quiz quiz) {
33        return quizrepo.save(quiz);
34    }
35
36    @DeleteMapping("/{id}")
37    public void delete(@PathVariable("id") Integer id) {
38        quizrepo.deleteById(id);
39    }
40 }
```

springboot - Quiz/src/main/java/com/project/quiz/controller/QuestionExceptionController.java - Spring Tool Suite 4

```

1 package com.project.quiz.controller;
2
3 import org.springframework.http.HttpStatus;
4
5 @ControllerAdvice
6 public ResponseEntity<Object> handleException(QuestionNotFoundException ex) {
7     return new ResponseEntity<Object>(ex.getMessage(), HttpStatus.NOT_FOUND);
8 }

```

springboot - Quiz/src/main/java/com/project/quiz/controller/QuestionController.java - Spring Tool Suite 4

```

1 package com.project.quiz.controller;
2
3 import java.util.Optional;
4
5 @RestController
6 @RequestMapping("/question")
7 public class QuestionController {
8
9     @Autowired
10    QuestionRepository quesrepo;
11
12    @GetMapping
13    public Iterable<Questions> getQuiz() {
14        return quesrepo.findAll();
15    }
16
17    @GetMapping("/{id}")
18    public Questions getQues(@PathVariable("id") Integer id) {
19        Optional<Questions> opt = quesrepo.findById(id);
20        if (opt.isEmpty()) {
21            throw new QuestionNotFoundException(id);
22        }
23        return opt.get();
24    }
25
26    @PostMapping
27    public Questions create(@RequestBody Questions ques) {
28        return quesrepo.save(ques);
29    }
30
31    @PutMapping
32    public Questions update(@RequestBody Questions ques) {
33        return quesrepo.save(ques);
34    }
35
36    @DeleteMapping("/{id}")
37    public void delete(@PathVariable("id") Integer id) {
38        quesrepo.deleteById(id);
39    }

```

springboot - Quiz/src/main/java/com/project/quiz/controller/AnswerController.java - Spring Tool Suite 4

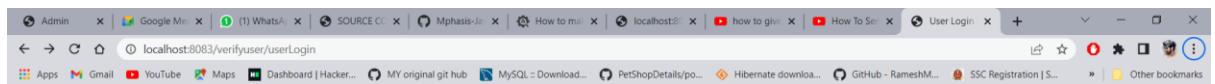
```

1 package com.project.quiz.controller;
2
3 import java.util.Optional;
4
5 @RestController
6 @RequestMapping("/answer")
7 public class AnswerController {
8
9     @Autowired
10    AnswerRepository anrepo;
11
12    @GetMapping
13    public Iterable<Answer> getQuiz() {
14        return anrepo.findAll();
15    }
16
17    @GetMapping("/{id}")
18    public String getQues(@PathVariable("id") Integer id) {
19        Optional<Answer> opt = anrepo.findById(id);
20        if (opt.isEmpty()) {
21            return "Answer not found";
22        }
23        return opt.get().toString();
24    }
25
26    @PostMapping
27    public Answer create(@RequestBody Answer ans) {
28        return anrepo.save(ans);
29    }
30
31    @PutMapping
32    public Answer update(@RequestBody Answer ans) {
33        return anrepo.save(ans);
34    }
35
36    @DeleteMapping("/{id}")
37    public void delete(@PathVariable("id") Integer id) {
38        anrepo.deleteById(id);
39    }

```

Here , adding Screenshots of 2.QuizUser

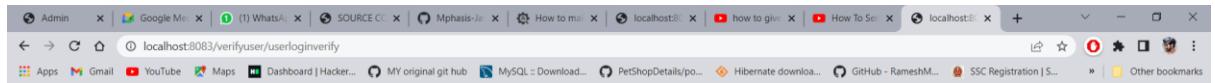
Postman&Browser:

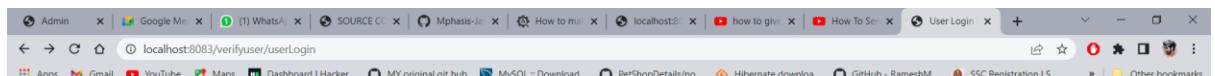


Please login to continue

Username:

Password:

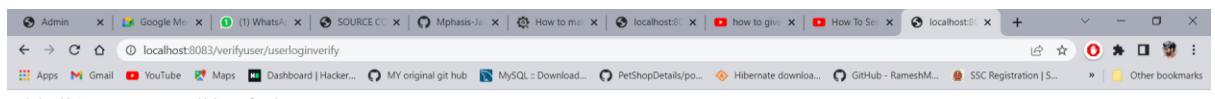




Please login to continue

Username:

Password:



Admin with Username: yty password john not found.

Home Workspaces API Network Explore

My Workspace New Import

localhost:8083/user

POST localhost:8083/user

Params Authorization Headers (9) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1
2   ...
3     ...
4       ...
5         ...
```

Body Cookies (1) Headers (5) Test Results

Pretty Raw Preview Visualize JSON

```
1
2   {
3     "quizid": 1,
4     "quizname": "Test1"
5   },
6   {
7     "quizid": 2,
8     "quizname": "Test2"
9   },
10  {
11    "quizid": 3,
12    "quizname": "test3"
13 }
```

Status: 200 OK Time: 10 ms Size: 261 B Save Response

No APIs yet

APIs define related collections and environments under a consistent schema.

Create an API

Start working with APIs 67% Next: Save a request. Show me

Online Find and Replace Console

Upgrade Invite Help

Save Send

Cookies Beautify

Home Workspaces API Network Explore

My Workspace New Import

localhost:8083/user

POST localhost:8083/user

Params Authorization Headers (9) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1
2   ...
3     ...
4       ...
5         ...
```

Body Cookies (1) Headers (5) Test Results

Pretty Raw Preview Visualize JSON

```
1
2   {
3     "id": 2,
4     "name": "max",
5     "email": "max@john",
6     "password": "john"
7 }
```

Status: 200 OK Time: 154 ms Size: 222 B Save Response

No APIs yet

APIs define related collections and environments under a consistent schema.

Create an API

Start working with APIs 67% Next: Save a request. Show me

Online Find and Replace Console

Upgrade Invite Help

Save Send

Cookies Capture requests Bootcamp Runner Trash

The screenshot shows the Postman application interface. On the left, there's a sidebar with options like 'My Workspace', 'Collections', 'APIs' (which is selected), 'Environments', 'Mock Servers', 'Monitors', 'Flows', and 'History'. The main area displays a message 'No APIs yet' with a small icon of a person holding a book. Below this, it says 'APIs define related collections and environments under a consistent schema.' and a 'Create an API' button.

In the center, a request card is shown for 'localhost:8083/user' with a 'GET' method. The 'Body' tab is selected, showing a JSON payload:

```
1
2 ...
3   ...
4   ...
5 }
```

The response section shows the status as 'Status: 200 OK' with a time of '28 ms' and a size of '279 B'. The response body is displayed in a JSON viewer:

```
1 [
2   {
3     "id": 1,
4     "name": "john",
5     "email": "x@y",
6     "password": "john"
7   },
8   {
9     "id": 2,
10    "name": "max",
11    "email": "max@john",
12    "password": "john"
13 }
```

--→

Here , Using DTO (data transfer object) & Using microservices connection: We can Use the Quiz App portal data in QuizUser Portal:given Below

Add Quiz

QuizID	3
QuesID	1

Quiz Portal

Search for the quiz: Test1

MySQL Workbench

Local instance MySQL80 ×

File Edit View Query Database Server Tools Help

Navigator: Schemas: myquizportal

SQL File 8* | SQL File 13* | SQL File 16* | SQL File 17* | SQL File 17* | SQL File 11* | SQL File 12* | SQL File 13 | SQL File 14* | myquizportal - Schema | SQL File 13* | SQL Additions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

1 • select * from myquizportal.quiz_page;

Result Grid | Filter Rows: [] | Edit: [] | Export/Import: [] | Wrap Cell Content: []

paged	quesid	quizid
1	1	1
2	2	1
3	2	2
4	2	2
5	1	3

Schema: myquizportal

Output: Action Output

#	Time	Action	Message	Duration / Fetch
28	00:26:12	select * from myquizportal.user LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
29	00:34:49	select * from myquizportal.quiz_page LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

localhost:8083/quiz/testpage?quiz=test3

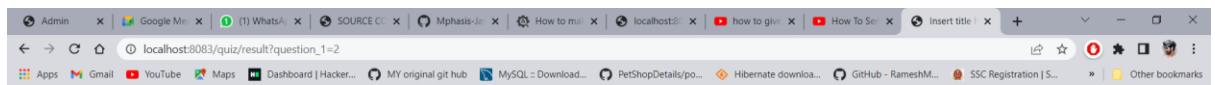
Other bookmarks: Apps Gmail YouTube Maps Dashboard | Hacker... MY original git hub MySQL Download... PetShopDetails/po... Hibernate download... GitHub - RameshM... SSC Registration | S...

how many days in a week?

- seven
- 366

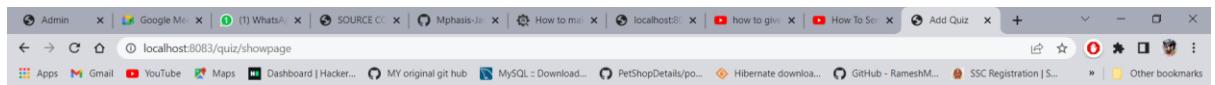
how many days in a leap-year?

- 31



Your Final Result is 1

<



Add Quiz

QuizID
QuesID

Here , I added the Screenshots of Project Structure and other code pics of 2.QuizUser portal:

The screenshot shows the Spring Tool Suite 4 interface with two tabs open:

- springboot - QuizUser/pom.xml - Spring Tool Suite 4**: This tab displays the `pom.xml` file for the QuizUser project. The XML content includes dependencies for Java Servlet, Taglibs Standard, MySQL Connector-Java, and Spring Boot DevTools, along with a dependency on the Spring Boot Starter Test artifact.
- springboot - QuizUser/src/main/webapp/WEB-INF/views/final.jsp - Spring Tool Suite 4**: This tab displays the JSP code for the final.jsp page. The code includes JSTL tags for outputting user scores and a title.

```

<dependency>
    <groupId>javax.servlet</groupId>
    <artifactId>jstl</artifactId>
    <version>1.2</version>
</dependency>
<dependency>
    <groupId>taglibs</groupId>
    <artifactId>standard</artifactId>
    <version>1.1.2</version>
</dependency>
<dependency>
    <groupId>javax.servlet</groupId>
    <artifactId>javax.servlet-api</artifactId>
    <version>3.0.1</version>
    <scope>provided</scope>
</dependency>
<dependency>
    <groupId>mysql</groupId>
    <artifactId>mysql-connector-java</artifactId>
    <scope>runtime</scope>
</dependency>
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-devtools</artifactId>
    <scope>runtime</scope>
    <optional>true</optional>
</dependency>
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-test</artifactId>
    <scope>test</scope>
</dependency>
<dependency>
    <groupId>com.example</groupId>
    <artifactId>QuizUser</artifactId>
    <version>0.0.1-SNAPSHOT</version>
    <scope>test</scope>
</dependency>
<build>
    <plugins>
        ...
    </plugins>
</build>
<dependencies>
    ...
</dependencies>
<build>
    ...
</build>
<plugins>
    ...
</plugins>

```

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1" isELIgnored="false" %>
<!DOCTYPE html>
<html>
<head>
    <meta charset="ISO-8859-1">
    <title>Insert title here</title>
</head>
<body>
    <h2>Your Final Result is </h2>
    <:forEach items="${scores}" var="score">
        <li>${score.uname} | ${score.scorecard} </li>
    </:forEach>
</body>
</html>

```

springboot - QuizUser/src/main/webapp/WEB-INF/views/cppQuiz.jsp - Spring Tool Suite 4

```

<%@ page language="Java" contentType="text/html; charset=ISO-8859-1"
%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<!DOCTYPE html>
<html>
    <head>
        <meta charset="ISO-8859-1">
        <title>Quiz Portal</title>
    </head>
    <body>
        <form action="result">
            <c:forEach items="${quiz}" var="quiz" begin="2" end="2">
                <c:forEach items="${ques}" var="ques" begin="2" end="2">
                    <h2>
                        <:out value="${ques.ques}" />
                    </h2>
                    <c:forEach var="answer" items="${answer}" begin="4" end="5">
                        <li><input type="radio" name="question_${ques.id}" value="${answer.id}" /> <:out value="${answer.ans}" /></li>
                    </c:forEach>
                <c:forEach items="${ques}" var="ques" begin="3" end="3">
                    <h2>
                        <:out value="${ques.ques}" />
                    </h2>
                    <c:forEach var="answer" items="${answer}" begin="6" end="7">
                        <li><input type="radio" name="question_${ques.id}" value="${answer.id}" /> <:out value="${answer.ans}" /></li>
                    </c:forEach>
                </c:forEach>
            </c:forEach>
            <input type="submit" value="Submit" />
        </form>
    </body>
</html>

```

Project Explorer JUnit application... ScoreCompare... UserRepo... UserLogin.jsp javaQuiz.jsp showAddQuiz... showQuizSta... cppQuiz.jsp

File Edit Navigate Search Project Run Window Help

There is no active editor that provides an outline.

springboot - QuizUser/src/main/webapp/WEB-INF/views/showQuizStartPage.jsp - Spring Tool Suite 4

```

<%@ page language="Java" contentType="text/html; charset=ISO-8859-1"
%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<!DOCTYPE html>
<html>
    <head>
        <meta charset="ISO-8859-1">
        <title>Quiz Portal</title>
    </head>
    <body>
        <form action="testpage">
            <table>
                <tr>
                    <td>Search for the quiz:</td>
                    <td><select name="quiz">
                        <c:forEach items="${quiz}" var="quiz">
                            <option>$quiz.quizname</option>
                        </c:forEach>
                    </select></td>
                </tr>
                <tr>
                    <td></td>
                    <td><input type="submit" value="Start" /></td>
                </tr>
            </table>
        </form>
        <br />
        <br />
    </body>
</html>

```

Project Explorer JUnit application... QuizPageRepo... ScoreCompare... UserRepo... UserLogin.jsp javaQuiz.jsp showAddQuiz... showQuizSta... cppQuiz.jsp

File Edit Navigate Search Project Run Window Help

There is no active editor that provides an outline.

springboot - QuizUser/src/main/webapp/WEB-INF/views/showAddQuizPage.jsp - Spring Tool Suite 4

```

<%@ page encoding="ISO-8859-1" isELIgnored="false"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<!DOCTYPE html>
<html>
    <head>
        <meta charset="ISO-8859-1">
        <title>Add Quiz</title>
    </head>
    <body>
        <h1>Add Quiz</h1>
        <form action="addtoquiz" method="post">
            <table>
                <tr>
                    <td>QuizID</td>
                    <td><select name="quizid">
                        <c:forEach items="${quiz}" var="quiz">
                            <option>$quiz.quizid</option>
                        </c:forEach>
                    </select></td>
                </tr>
                <tr>
                    <td>QuesID</td>
                    <td><select name="quesid">
                        <c:forEach items="${ques}" var="ques">
                            <option>$ques.id</option>
                        </c:forEach>
                    </select></td>
                </tr>
                <tr>
                    <td></td>
                    <td><input type="submit" value="Add" /></td>
                </tr>
            </table>
        </form>
        <br />
        <br />
    </body>
</html>

```

Project Explorer JUnit application... UserNotFound... QuizPageRepo... ScoreCompare... UserRepo... UserLogin.jsp javaQuiz.jsp showAddQuiz... showQuizSta... cppQuiz.jsp

File Edit Navigate Search Project Run Window Help

There is no active editor that provides an outline.

springboot - QuizUser/src/main/webapp/WEB-INF/views/javaQuiz.jsp - Spring Tool Suite 4

```

<application>
    <meta charset="ISO-8859-1">
    <title>Java Quiz</title>
    <head>
        <form action="result">
            <c:forEach items="${quiz}" var="quiz" begin="1" end="1">
                <c:forEach items="${ques}" var="ques" begin="0" end="0">
                    <h2>
                        <c:out value="${ques.ques}" />
                    </h2>
                    <br />
                    <c:forEach var="answer" items="${answer}" begin="0" end="1">
                        <li><input type="radio" name="question_${ques.id}" value="${answer.id}" /> <c:out value="${answer.ans}" /></li>
                    </c:forEach>
                </c:forEach>
            <h2>
                <c:out value="${ques.ques}" />
            </h2>
            <br />
            <c:forEach var="answer" items="${answer}" begin="2" end="3">
                <li><input type="radio" name="question_${ques.id}" value="${answer.id}" /> <c:out value="${answer.ans}" /></li>
            </c:forEach>
        </c:forEach>
        <input type="submit" value="Submit" />
    </form>
    <44/ body>
<45/ html>

```

springboot - QuizUser/src/main/webapp/WEB-INF/views/UserLogin.jsp - Spring Tool Suite 4

```

<1><!DOCTYPE html>
<2><html>
<3><head>
<4>    <meta charset="US-ASCII">
<5>    <title>User Login Page</title>
<6>    <h1>Please login to continue</h1>
<7>    <body>
<8>        <form action="userloginverify" method="post">
<9>            Username: <input type="text" name="name"> <br> Password: <input type="password" name="password"> <br> <br> <input type="submit" value="Login" />
<10>        </form>
<11>    </body>
<12>    </html>

```

springboot - QuizUser/src/main/resources/application.properties - Spring Tool Suite 4

```

1 <server.port=8083
2 spring.datasource.url=jdbc:mysql://localhost:3306/myquizportal
3 spring.datasource.username=root
4 spring.datasource.password=Veda@1202189
5 spring.jpa.properties.hibernate.show_sql=true
6 spring.jpa.properties.hibernate.format_sql=true
7 spring.jpa.hibernate.ddl-auto=update
8 spring.mvc.view.prefix=/WEB-INF/views/
9 spring.mvc.view.suffix=.jsp
10 logging.level.org.hibernate=INFO
11 logging.level.org.hibernate.SQL=INFO
12 logging.level.org.hibernate.type.descriptor.sql.BasicBinder=TRACE
13 logging.level.org.springframework=INFO
14 #logging.level.org.apache=ERROR
15 #logging.level.org.springframework.web=TRACE
16
17

```

springboot - QuizUser/src/main/java/com/project/quizuser/Repo/UserRepository.java - Spring Tool Suite 4

```

1 package com.project.quizuser.Repo;
2
3 import java.util.Optional;
4
5 public interface UserRepository extends CrudRepository<User, Integer> {
6
7     Optional<User> findByNameAndPassword(String name, String password);
8 }
9 
```

springboot - QuizUser/src/main/java/com/project/quizuser/Repo/ScoreCompareRepository.java - Spring Tool Suite 4

```

1 package com.project.quizuser.Repo;
2
3 import org.springframework.data.repository.CrudRepository;
4
5 public interface ScoreCompareRepository extends CrudRepository<ScoreCompare, String> {
6 }
7 
```

springboot - QuizUser/src/main/java/com/project/quizuser/Repo/QuizPageRepository.java - Spring Tool Suite 4

```

1 package com.project.quizuser.Repo;
2
3 import org.springframework.data.repository.CrudRepository;
4
5 public interface QuizPageRepository extends CrudRepository<QuizPage, Integer> {
6 }
7 
```

springboot - QuizUser/src/main/java/com/project/quizuser/exceptions/UserNotFoundException.java - Spring Tool Suite 4

```

1 package com.project.quizuser.exceptions;
2
3 public class UserNotFoundException extends RuntimeException {
4     public UserNotFoundException(Integer id) {
5         super("User with id " + id + " not found.");
6     }
7
8     public UserNotFoundException(String username, String password) {
9         super("Admin with Username: " + username + " password: " + password + " not found.");
10    }
11 }
12
13 }
14

```

Project Explorer > JUnit > UserNotFoundException.java

src/main/java

- com.project.quizuser
 - QuizUserApplication.java
 - ScoreCompareController.java
 - UserController.java
 - UserExceptionController.java
 - UserQuizController.java
 - UserVerifyController.java
 - com.project.quizuser.dto
 - Answer.java
 - Questions.java
 - Quiz.java
 - com.project.quizuser.entity
 - QuizPage.java
 - ScoreCompare.java
 - User.java
 - com.project.quizuser.exceptions
 - UserNotFoundException.java
 - com.project.quizuser.Repo
 - QuizPageRepository.java
 - ScoreCompareRepository.java
 - UserRepository.java
- src/main/resources
 - static
 - templates
 - application.properties
- src/test/java
- JRE System Library [JavaSE-17]
- Maven Dependencies
- src
 - main
 - java
 - resources
 - webapp

springboot - QuizUser/src/main/java/com/project/quizuser/entity/User.java - Spring Tool Suite 4

```

1 package com.project.quizuser.entity;
2
3 import javax.persistence.Entity;
4
5 @Entity(name="user")
6 public class User {
7     @Id
8     @GeneratedValue(strategy = GenerationType.IDENTITY)
9     private Integer id;
10    private String name;
11    private String email;
12    private String password;
13
14    public Integer getId() {
15        return id;
16    }
17
18    public void setId(Integer id) {
19        this.id = id;
20    }
21
22    public String getName() {
23        return name;
24    }
25
26    public void setName(String name) {
27        this.name = name;
28    }
29
30    public String getEmail() {
31        return email;
32    }
33
34    public void setEmail(String email) {
35        this.email = email;
36    }
37
38 }
39

```

Project Explorer > JUnit > User.java

src/main/java

- com.project.quizuser
 - QuizUserApplication.java
 - ScoreCompareController.java
 - UserController.java
 - UserExceptionController.java
 - UserQuizController.java
 - UserVerifyController.java
 - com.project.quizuser.dto
 - Answer.java
 - Questions.java
 - Quiz.java
 - com.project.quizuser.entity
 - QuizPage.java
 - ScoreCompare.java
 - User.java
 - com.project.quizuser.exceptions
 - UserNotFoundException.java
 - com.project.quizuser.Repo
 - QuizPageRepository.java
 - ScoreCompareRepository.java
 - UserRepository.java
- src/main/resources
 - static
 - templates
 - application.properties
- src/test/java
- JRE System Library [JavaSE-17]
- Maven Dependencies
- src
 - main
 - java
 - resources
 - webapp

springboot - QuizUser/src/main/java/com/project/quizuser/entity/ScoreCompare.java - Spring Tool Suite 4

```

1 package com.project.quizuser.entity;
2
3 import javax.persistence.Entity;
4
5 @Entity(name="ScoreCompare")
6 public class ScoreCompare {
7     @Id
8     private String uname;
9     private int scorecard;
10
11    public String getUname() {
12        return uname;
13    }
14
15    public void setUname(String uname) {
16        this.uname = uname;
17    }
18
19    public int getScorecard() {
20        return scorecard;
21    }
22
23    public void setScorecard(int scorecard) {
24        this.scorecard = scorecard;
25    }
26
27    @Override
28    public String toString() {
29        return "ScoreCompare [uname=" + uname + ", scorecard=" + scorecard + "]";
30    }
31
32 }
33

```

Project Explorer > JUnit > ScoreCompare.java

src/main/java

- com.project.quizuser
 - QuizUserApplication.java
 - ScoreCompareController.java
 - UserController.java
 - UserExceptionController.java
 - UserQuizController.java
 - UserVerifyController.java
 - com.project.quizuser.dto
 - Answer.java
 - Questions.java
 - Quiz.java
 - com.project.quizuser.entity
 - QuizPage.java
 - ScoreCompare.java
 - User.java
 - com.project.quizuser.exceptions
 - UserNotFoundException.java
 - com.project.quizuser.Repo
 - QuizPageRepository.java
 - ScoreCompareRepository.java
 - UserRepository.java
- src/main/resources
 - static
 - templates
 - application.properties
- src/test/java
- JRE System Library [JavaSE-17]
- Maven Dependencies
- src
 - main
 - java
 - resources
 - webapp

QuizPage.java

```

package com.project.quizuser.entity;

import javax.persistence.Entity;
import javax.persistence.GeneratedValue(strategy = GenerationType.IDENTITY);

@Entity
public class QuizPage {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int pageid;
    private int quizid;
    private int quesid;
    public int getPageid() {
        return pageid;
    }
    public void setPageid(int pageid) {
        this.pageid = pageid;
    }
    public int getQuizid() {
        return quizid;
    }
    public void setQuizid(int quizid) {
        this.quizid = quizid;
    }
    public int getQuesid() {
        return quesid;
    }
    public void setQuesid(int quesid) {
        this.quesid = quesid;
    }
}

```

Quiz.java

```

package com.project.quizuser.dto;

public class Quiz {
    private int quizid;
    private String quizname;
    public int getQuizid() {
        return quizid;
    }
    public void setQuizid(int quizid) {
        this.quizid = quizid;
    }
    public String getQuizname() {
        return quizname;
    }
    public void setQuizname(String quizname) {
        this.quizname = quizname;
    }
}

```

Questions.java

```

package com.project.quizuser.dto;

import java.util.HashSet;
import java.util.Set;

public class Questions {
    private int quesid;
    private String ques;
    private Set<Answer> answers = new HashSet<>();
    public Set<Answer> getAnswers() {
        return answers;
    }
    public void setAnswers(Set<Answer> answers) {
        this.answers = answers;
    }
    public int getQuesid() {
        return quesid;
    }
    public void setQuesid(int quesid) {
        this.quesid = quesid;
    }
    public String getQues() {
        return ques;
    }
    public void setQues(String ques) {
        this.ques = ques;
    }
}

```

The image displays three separate Eclipse IDE windows, each showing a different Java file from a Spring Boot application. The leftmost window shows `Answer.java`, which defines a simple `Answer` class with attributes `id`, `ans`, and `ques`. The middle window shows `UserVerifyController.java`, which contains a `UserVerifyController` class with methods for handling user login and verification. The rightmost window shows `UserQuizController.java`, which contains a `UserQuizController` class with methods for displaying quizzes and answers.

```
springboot - QuizUser/src/main/java/com/project/quizuser/dto/Answer.java - Spring Tool Suite 4
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer JUnit
QuizUser [boot] [devtools]
src/main/java
com.project.quizuser
QuizUserApplication.java
com.project.quizuser.controller
ScoreCompareController.java
UserController.java
UserExceptionController.java
UserQuizController.java
UserVerifyController.java
com.project.quizuser.dto
Answer.java
Questions.java
Quiz.java
com.project.quizuser.entity
QuizPage.java
ScoreCompare.java
User.java
com.project.quizuser.exceptions
QuizPageRepository.java
ScoreCompareRepository.java
UserRepository.java
src/main/resources
static
templates
application.properties
src/test/java
JRE System Library [JavaSE-17]
Maven Dependencies
src
main
java
resources
webapp
mca.jnlp

springboot - QuizUser/src/main/java/com/project/quizuser/controller/UserVerifyController.java - Spring Tool Suite 4
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer JUnit
QuizUser [boot] [devtools]
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UserExceptionController.java
UserQuizController.java
com.project.quizuser.dto
Answer.java
Questions.java
Quiz.java
com.project.quizuser.entity
QuizPage.java
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springboot - QuizUser/src/main/java/com/project/quizuser/controller/UserQuizController.java - Spring Tool Suite 4
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static
templates
application.properties
src/test/java
JRE System Library [JavaSE-17]
Maven Dependencies
src
main
java
resources
webapp
mca.jnlp
```

The image displays three vertically stacked screenshots of the Eclipse IDE interface, each showing a different Java controller class:

- QuizUserController.java**: This controller handles quiz-related requests. It includes methods for creating quizzes, adding questions to quizzes, and displaying quiz pages. It uses RestTemplate to interact with external services like QuizPageRepository and ScoreCompareRepository.
- UserExceptionController.java**: This controller handles exception handling. It uses @ExceptionHandler to map specific exception types to appropriate HTTP status codes (e.g., 404 for UserNotFoundException).
- UserController.java**: This controller handles user-related requests. It uses @GetMapping and @PostMapping annotations to handle user retrieval, creation, update, and deletion. It interacts with a UserRepository.

Each screenshot shows the Java code in the central editor, the Project Explorer on the left, and the Java EE perspective on the right. The bottom of each window shows the Eclipse status bar indicating the date and time (11-Sep-2022, 11:11:14 pm) and the Java process ID (pid: 39156).

springboot - QuizUser/src/main/java/com/project/quizuser/controller/ScoreCompareController.java - Spring Tool Suite 4

```

1 package com.project.quizuser.controller;
2
3 import org.springframework.beans.factory.annotation.Autowired;
4
5 @RestController
6 @RequestMapping("/scorecard")
7 public class ScoreCompareController {
8
9     @Autowired
10    ScoreCompareRepository repo;
11
12    @GetMapping
13    public Iterable<ScoreCompare> getUser() {
14        return repo.findAll();
15    }
16
17    @PostMapping
18    public ScoreCompare create(@RequestBody ScoreCompare sc) {
19        return repo.save(sc);
20    }
21
22 }
23
24
25
26
27
28
29 }
30

```

QuizUserApplication [Java Application] C:\eclipseWorkspace\sts-4.15.3.RELEASE\plugins\org.eclipse.jst.jdt.core\bin\java.exe (11-Sep-2022, 11:11:14 pm) [pid: 39156]

```

1 package com.project.quizuser;
2
3 import org.springframework.boot.SpringApplication;
4
5 @SpringBootApplication
6 public class QuizUserApplication {
7
8     public static void main(String[] args) {
9         SpringApplication.run(QuizUserApplication.class, args);
10    }
11
12 }
13
14

```

QuizUserApplication [Java Application] C:\eclipseWorkspace\sts-4.15.3.RELEASE\plugins\org.eclipse.jst.jdt.core\bin\java.exe (11-Sep-2022, 11:11:14 pm) [pid: 39156]

The screenshot displays two integrated development environments (IDEs) side-by-side.

Spring Tool Suite (Left):

- Project Explorer:** Shows the project structure for "QuizUser". It includes:
 - src/main/java/com/project.quizuser
 - src/main/java/com.project.quizuser.controller
 - src/main/java/com.project.quizuser.entity
 - src/main/java/com.project.quizuser.exceptions
 - src/main/java/com.project.quizuser.repositories
 - src/main/resources/application.properties
 - src/test/java
 - JRE System Library [JavaSE-17]
 - Maven Dependencies
 - src/main/java/com/project.quizuser
 - src/main/resources
 - src/main/java/main
 - src/main/java/resources
 - src/main/webapp
- Code Editor:** A Java file named "QuizUserApplication.java" is open, showing the main application class.

MySQL Workbench (Right):

- Schemas:** The "myquizportal" schema is selected, showing tables like "admin", "answer", "questions", "quiz", "quiz_page", "score_comparisons", and "user".
- SQL Editor:** A query is run against the "myquizportal.quiz_page" table:


```
1 select * from myquizportal.quiz_page
```

 The result grid shows the following data:

paged	quesid	quizid
1	1	1
2	2	1
3	2	2
4	2	2
5	1	3
- Output:** The "Action Output" pane shows the execution of the SQL query:

Action	Time	Message	Duration / Fetch
select * from myquizportal.user	LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
select * from myquizportal.quiz_page	LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

If the Screenshots are not clear , I also added their code in PDF format:

Please go through them .As the Storage is limited for submission, I found it difficult to add clear images.