

# Online Quiz Portal Application

## (Source Codes)

### com.OnlineQuizPortalApplication(.java)

```
package com;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.boot.autoconfigure.domain.EntityScan;

@SpringBootApplication(scanBasePackages="com")
@EntityScan(basePackages="com.bean")
public class OnlineQuizPortalApplication {

    public static void main(String[] args) {
        SpringApplication.run(OnlineQuizPortalApplication.class, args);
        System.out.println("Server up...");
        System.out.println("*****This Project is Developed by Yadav Dhiraj  
Rajendra Prasad*****");
        System.out.println("*****ONLINE QUIZ PORTAL APPLICATION*****");
    }

}
```

### pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>
    <parent>
        <groupId>org.springframework.boot</groupId>
        <artifactId>spring-boot-starter-parent</artifactId>
        <version>2.6.11</version>
        <relativePath/>
    </parent>
    <groupId>com.example</groupId>
    <artifactId>OnlineQuizPortal</artifactId>
    <version>0.0.1-SNAPSHOT</version>
    <name>OnlineQuizPortal</name>
    <description>Demo project for Spring Boot</description>
    <properties>
        <java.version>11</java.version>
    </properties>
    <dependencies>
        <dependency>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-starter-data-jpa</artifactId>
        </dependency>
        <dependency>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-starter-web</artifactId>
        </dependency>
    </dependencies>
```

```

        <dependency>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-devtools</artifactId>
            <scope>runtime</scope>
            <optional>true</optional>
        </dependency>
        <dependency>
            <groupId>mysql</groupId>
            <artifactId>mysql-connector-java</artifactId>
            <scope>runtime</scope>
        </dependency>
        <dependency>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-starter-test</artifactId>
            <scope>test</scope>
        </dependency>
    </dependencies>

    <build>
        <plugins>
            <plugin>
                <groupId>org.springframework.boot</groupId>
                <artifactId>spring-boot-maven-plugin</artifactId>
            </plugin>
        </plugins>
    </build>
</project>

```

### application.properties(configuration file)

```

server.port 8081

spring.datasource.driver-class-name=com.mysql.cj.jdbc.Driver
spring.datasource.url=jdbc:mysql://localhost:3306/phase3
spring.datasource.username=root
spring.datasource.password=Dhiraj@1997

#spring.jpa.hibernate.ddl-auto=update

```

### com.bean.AnswerKey(.java)

```

package com.bean;

import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;

@Entity
public class Answerkey {
    @Id
    @GeneratedValue
    private int SNo;
    private String answer;
    private int ques_id;
    public int getSNo() {

```

```

        return SNo;
    }
    public void setSNo(int sNo) {
        SNo = sNo;
    }
    public String getAnswer() {
        return answer;
    }
    public void setAnswer(String answer) {
        this.answer = answer;
    }

    public int getQues_id() {
        return ques_id;
    }
    public void setQues_id(int ques_id) {
        this.ques_id = ques_id;
    }

    @Override
    public String toString() {
        return "Answerkey [SNo=" + SNo + ", answer=" + answer + "]";
    }
}

```

### com.bean.Participant(.java)

```

package com.bean;

import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;

@Entity
public class Participant {
    @Id
    @GeneratedValue
    private int pid;
    private String name;
    private int age;
    private String email;
    private String password;
    public int getPid() {
        return pid;
    }
    public void setPid(int pid) {
        this.pid = pid;
    }

    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public int getAge() {

```

```

        return age;
    }
    public void setAge(int age) {
        this.age = age;
    }
    public String getemail() {
        return email;
    }
    public void setemail(String email) {
        this.email = email;
    }
    public String getPassword() {
        return password;
    }
    public void setPassword(String password) {
        this.password = password;
    }

    @Override
    public String toString() {
        return "Participant [pid=" + pid + ", name=" + name + ", age=" + age
+ ", email=" + email + ", password="
        + password + "]";
    }
}

```

### com.bean.Questions(.java)

```

package com.bean;

import javax.persistence.Entity;
import javax.persistence.Id;

@Entity
public class Questions {
    @Id
    private int ques_id;
    private String quiz_topic;
    private String question;
    private String option1;
    private String option2;
    private String option3;
    private String option4;

    public int getQues_id() {
        return ques_id;
    }
    public void setQues_id(int ques_id) {
        this.ques_id = ques_id;
    }
    public String getQuiz_topic() {

```

```

        return quiz_topic;
    }
    public void setQuiz_topic(String quiz_topic) {
        this.quiz_topic = quiz_topic;
    }
    public String getQuestion() {
        return question;
    }
    public void setQuestion(String question) {
        this.question = question;
    }
    public String getOption1() {
        return option1;
    }
    public void setOption1(String option1) {
        this.option1 = option1;
    }
    public String getOption2() {
        return option2;
    }
    public void setOption2(String option2) {
        this.option2 = option2;
    }
    public String getOption3() {
        return option3;
    }
    public void setOption3(String option3) {
        this.option3 = option3;
    }
    public String getOption4() {
        return option4;
    }
    public void setOption4(String option4) {
        this.option4 = option4;
    }
    @Override
    public String toString() {
        return "Questions [ques_id=" + ques_id + ", question=" + question +
            ", option1=" + option1 + ", option2=" + option2
            + ", option3=" + option3 + ", option4=" + option4 +
            "]\n";
    }
}
}

```

### com.bean.Quiz(.java)

```

package com.bean;

import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;

@Entity
public class Quiz {

```

```

@Id
@GeneratedValue
private int quiz_id;
private String quiz_topic;

public int getQuiz_id() {
    return quiz_id;
}
public void setQuiz_id(int quiz_id) {
    this.quiz_id = quiz_id;
}
public String getQuiz_topic() {
    return quiz_topic;
}
public void setQuiz_topic(String quiz_topic) {
    this.quiz_topic = quiz_topic;
}
@Override
public String toString() {
    return "Quiz [quiz_id=" + quiz_id + ", quiz_topic=" + quiz_topic +
"]";
}
}

```

### com.bean.Responses(.java)

```

package com.bean;
import javax.persistence.Entity;
import javax.persistence.Id;

@Entity
public class Responses {
    @Id
    private int ques_id;
    private String response;

    public int getQues_id() {
        return ques_id;
    }
    public void setQues_id(int ques_id) {
        this.ques_id = ques_id;
    }
    public String getResponse() {
        return response;
    }
    public void setResponse(String response) {
        this.response = response;
    }
    @Override
    public String toString() {
        return "Responses [ques_id=" + ques_id + ", response=" + response +
"]";
    }
}

```

## com.controller.AdminController(.java)

```
package com.controller;

import java.util.List;

import javax.servlet.http.HttpServletRequest;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.MediaType;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RestController;

import com.bean.Answerkey;
import com.bean.Questions;
import com.bean.Quiz;
import com.service.AdminService;

@RestController
public class AdminController {
    @Autowired
    AdminService adminService;

    @RequestMapping(value = "admin/storeQuiz", consumes =
    MediaType.APPLICATION_JSON_VALUE, method = RequestMethod.POST)
    public String storeParticipant(@RequestBody Quiz quiz) { // scan
    the value from request body in the form json
        return adminService.storeQuiz(quiz);
    }

    @RequestMapping(value = "admin/storeQuestions", consumes =
    MediaType.APPLICATION_JSON_VALUE, method = RequestMethod.POST)
    public String storeQuestions(@RequestBody Questions questions) { //
    scan the value from request body in the form json
        return adminService.storeQuestions(questions);
    }

    @RequestMapping(value = "admin/QuizDetails", method =
    RequestMethod.GET, produces = MediaType.APPLICATION_JSON_VALUE)
    public List<Quiz> getQuizDetails() {
        return adminService.getQuizDetails();
    }

    @RequestMapping(value = "admin/storeAnswer", consumes =
    MediaType.APPLICATION_JSON_VALUE, method = RequestMethod.POST)
    public String storeParticipant(@RequestBody Answerkey ans) { //
    scan the value from request body in the form json
        return adminService.storeAnswerkey(ans);
    }
}
```

## com.controller.ParticipantController(.java)

```
package com.controller;

import java.util.List;

import javax.servlet.http.HttpServletRequest;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.MediaType;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestMethod;
import org.springframework.web.bind.annotation.RestController;

import com.bean.Participant;
import com.bean.Questions;
import com.bean.Quiz;
import com.bean.Responses;
import com.service.ParticipantService;

@RestController
public class ParticipantController {

    @Autowired
    ParticipantService participantService;

    @RequestMapping(value = "participant/storeParticipant", consumes =
    MediaType.APPLICATION_JSON_VALUE, method = RequestMethod.POST)
    public String storeParticipant(@RequestBody Participant participant) {
        // scan the value from request body in the form json
        return participantService.storeParticipant(participant);
    }

    @RequestMapping(value = "participant/QuizDetails", method =
    RequestMethod.GET, produces = MediaType.APPLICATION_JSON_VALUE)
    public List<Quiz> getQuizDetails() {
        return participantService.getQuizDetails();
    }

    @RequestMapping(value = "participant/Questions", method =
    RequestMethod.GET, produces = MediaType.APPLICATION_JSON_VALUE)
    public List<Questions> getQuestions() {
        return participantService.getQuestions();
    }

    @RequestMapping(value = "participant/storeResponse", consumes =
    MediaType.APPLICATION_JSON_VALUE, method = RequestMethod.POST)
    public String storeResponse(@RequestBody Responses response) {
        // scan the value from request body in the form json
        return participantService.storeResponse(response);
    }
}
```



## com.dao.AdminDao(.java)

```
package com.dao;

import java.util.List;

import javax.persistence.EntityManager;
import javax.persistence.EntityManagerFactory;
import javax.persistence.EntityTransaction;
import javax.persistence.Query;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Repository;

import com.bean.Answerkey;
import com.bean.Questions;
import com.bean.Quiz;

@Repository
public class AdminDAO {
    @Autowired
    EntityManagerFactory emf;

    public int storeQuiz(Quiz quiz) {
        try {
            EntityManager manager = emf.createEntityManager();
            EntityTransaction tran = manager.getTransaction();
            tran.begin();
            manager.persist(quiz);
            // session.save(emp)
            tran.commit();
            return 1;
        } catch (Exception e) {
            System.out.println(e);
            return 0;
        }
    }

    public List<Quiz> getQuizDetails() {
        EntityManager manger = emf.createEntityManager();
        Query qry = manger.createQuery("select q from Quiz q");
        // JPQL
        List<Quiz> listOfQuiz = qry.getResultList();
        return listOfQuiz;
    }

    public int storeQuestions(Questions questions) {
        try {
            EntityManager manager = emf.createEntityManager();
            EntityTransaction tran = manager.getTransaction();
            tran.begin();
            manager.persist(questions);
            // session.save(emp)
            tran.commit();
            return 1;
        } catch (Exception e) {
            System.out.println(e);
            return 0;
        }
    }
}
```

```

    }

    public int storeAnswerkey(Answerkey ans) {
        try {
            EntityManager manager = emf.createEntityManager();
            EntityTransaction tran = manager.getTransaction();
            tran.begin();
            manager.persist(ans);
            // session.save(emp)
            tran.commit();
            return 1;
        } catch (Exception e) {
            System.out.println(e);
            return 0;
        }
    }
}

```

### com.dao.ParticipantDao(.java)

```

package com.dao;

import java.util.List;

import javax.persistence.EntityManager;
import javax.persistence.EntityManagerFactory;
import javax.persistence.EntityTransaction;
import javax.persistence.Query;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Repository;

import com.bean.Participant;
import com.bean.Questions;
import com.bean.Quiz;
import com.bean.Responses;

@Repository
public class ParticipantDAO {

    @Autowired
    EntityManagerFactory emf;

    public int storeParticipant(Participant participant) {
        try {
            EntityManager manager = emf.createEntityManager();
            EntityTransaction tran = manager.getTransaction();
            tran.begin();
            manager.persist(participant);
            // session.save(emp)
            tran.commit();
            return 1;
        } catch (Exception e) {
            System.out.println(e);
            return 0;
        }
    }
}

```

```

    }

    public List<Quiz> getQuizDetails() {
        EntityManager manger = emf.createEntityManager();
        Query qry = manger.createQuery("select q from Quiz q");
        // JPQL
        List<Quiz> listOfQuiz = qry.getResultList();
        return listOfQuiz;
    }

    public List<Questions> getQuestions() {
        EntityManager manger = emf.createEntityManager();
        Query qry = manger.createQuery("select q from Questions q");
        // JPQL
        List<Questions> listOfQuestions = qry.getResultList();
        return listOfQuestions;
    }

    public int storeResponse(Responses response) {
        try {
            EntityManager manager = emf.createEntityManager();
            EntityTransaction tran = manager.getTransaction();
            tran.begin();
            manager.persist(response);
            // session.save(emp)
            tran.commit();
            return 1;
        } catch (Exception e) {
            System.out.println(e);
            return 0;
        }
    }
}

```

### com.service.AdminService(.java)

```

package com.service;

import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

import com.bean.Answerkey;
import com.bean.Questions;
import com.bean.Quiz;
import com.dao.AdminDAO;

@Service
public class AdminService {
    @Autowired
    AdminDAO AdminDao;

    public String storeQuiz(Quiz quiz) {
        if(AdminDao.storeQuiz(quiz)>0) {

```

```

        return "Quiz details stored";
    }else {
        return "Quiz details didn't store";
    }
}

public List<Quiz> getQuizDetails() {
    return AdminDao.getQuizDetails();
}

public String storeQuestions(Questions questions) {
    if(AdminDao.storeQuestions(questions)>0) {
        return "Questions stored";
    }else {
        return "Questions didn't store";
    }
}

public String storeAnswerkey(Answerkey ans) {
    if(AdminDao.storeAnswerkey(ans)>0) {
        return "Answer stored";
    }else {
        return "Answer didn't store";
    }
}
}

```

### com.service.ParticipantService(.java)

```

package com.service;

import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

import com.bean.Participant;
import com.bean.Questions;
import com.bean.Quiz;
import com.bean.Responses;
import com.dao.ParticipantDAO;

@Service
public class ParticipantService {
    @Autowired
    ParticipantDAO participantDao;

    public String storeParticipant(Participant participant) {
        if(participantDao.storeParticipant(participant)>0) {
            return "Participant details stored";
        }else {
            return "Participant details didn't store";
        }
    }

    public List<Quiz> getQuizDetails() {

```

```
        return participantDao.getQuizDetails();
    }

    public List<Questions> getQuestions() {
        return participantDao.getQuestions();
    }

    public String storeResponse(Responses response) {
        if(participantDao.storeResponse(response)>0) {
            return "Response stored";
        }else {
            return "Response didn't store";
        }
    }
}
```