

The background is a solid dark blue. Overlaid on this are several thin, gold-colored lines that form abstract, angular shapes. These shapes resemble stylized mountains or jagged peaks, with some lines extending from the left and right edges towards the center. A large, dark blue rectangle with a gold border is positioned in the center, containing the title text.

Hobby Spring Project

By Andrew McCall

Version Control & Source Code Management

AM: Working Dev into main #5



Andrew-McCall wants to merge 29 commits into `main` from `dev`



Conversation 0



Commits 29



Checks 0



Files changed 36



Andrew-McCall commented now

Owner



No description provided.

Andrew-McCall added 29 commits 10 days ago

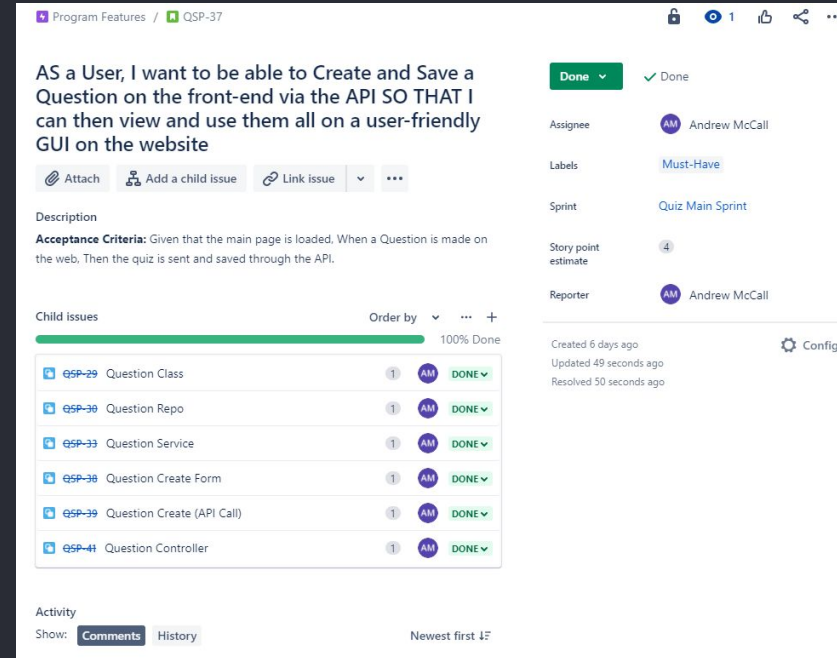
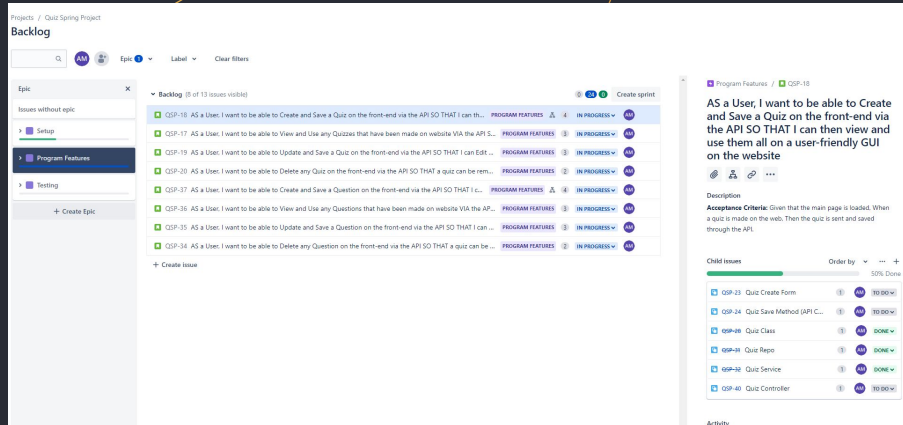
- AM: QSP-28 QSP-29 > Created Quiz & Question Classes 7db22e1
- AM: QSP-30 QSP-31 > Created Quiz & Question Repo interfaces (No Custo... 8ab828e
- AM: QSP-32 QSP-33 > Created Quiz & Question Services 4962173
- AM: QSP-6 > Configured Connection to GCP in app.properties Also fixx... 5343b39
- AM: Controllers Started 200a9ce
- AM: Quiz Controller Started, Create and Get e088a15
- AM: QSP-40 > Quiz Controller 27f014a
- AM: general fixes and clean-up 04a6b40
- AM: Fixed the infinite recursion of the get json API callgit bed4cf2

Github was used to manage and store previous versions of my code.

Github

Kanban Board


I used jira to layout my project on a Kanban Board with the SCRUM agile Methodology.




Database


Using free trial credits, I reserve a single core on Google Cloud Platform for my MySQL database to run headlessly in the cloud.

| <input type="checkbox"/> | Instance ID ? ↑ | Type | Public IP address |
|--------------------------|--|-----------|-------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> qproject-1 | MySQL 8.0 | 34.105.178.249 |


 Configuration

| | | |
|-------|---------|-------------|
| vCPUs | Memory | SSD storage |
| 1 | 3.75 GB | 10 GB |

 Free trial credit



£163
Free trial credit
Out of £216



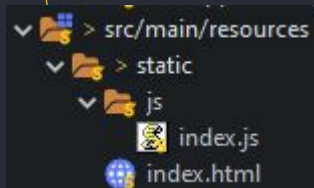
43
Days remaining
Ends 3 August 2021

You will not be billed during your free trial. To keep your projects running after the free trial has finished, upgrade to a paid account.

[UPGRADE](#) [LEARN MORE](#)

Front-End Web Technologies

Html files in the static will be caught by Spring Boot and then hosted. There is only one page, index. It uses Bootstrap CSS and Bootstrap Js as well as index.js which interacts with the REST API



Quiz Name

Description

Create New Quiz

Question Set 1

Question description 1

| Question | Answer | Edit |
|------------|----------|------------------------------|
| Question 1 | Answer 2 | <div>Edit</div> <div>X</div> |

Use Quiz

Edit Quiz

New Question

Build Tool

```
[INFO] --- maven-jar-plugin:3.2.0:jar (default-jar) @ SpringQuizProject ---
[INFO] Building jar: C:\Users\andre\Documents\eclipse\QuizSpringProject\target\SpringQuizProject-0.0.1.jar
[INFO] --- jacoco-maven-plugin:0.8.6:report (jacoco-site) @ SpringQuizProject ---
[INFO] Loading execution data file C:\Users\andre\Documents\eclipse\QuizSpringProject\target\jacoco.exec
[INFO] Analyzed bundle 'SpringQuizProject' with 7 classes
[INFO] --- spring-boot-maven-plugin:2.5.0:repackage (repackage) @ SpringQuizProject ---
[INFO] Replacing main artifact with repackaged archive
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 24.190 s
[INFO] Finished at: 2021-06-21T11:36:35+01:00
[INFO] -----

andre@LAZIRUS MINGW64 ~/Documents/eclipse/QuizSpringProject (main)
$ java -jar SpringQuizProject-0.0.1.jar
```

Using maven i can package my project into a .jar or .war (depending on the where it will be distributed to (Web Server or General Application)).

Maven runs all my test before it completes any build and if a test fails, the build is canceled

Automated Testing - Junit5, Mockito, Selenium

My tests are ran automatically on each maven build and on average, they cover 92% of my total code.

The classes with below 80% coverage are made of auto-generated functions that do not need testing.

| | | |
|---------------------------|--------------------------------|-------|
| QuizSpringProject | <div><div></div></div> 92.3 % | 1,981 |
| src/main/java | <div><div></div></div> 81.5 % | 616 |
| com.qa.quiz.domain | <div><div></div></div> 76.6 % | 403 |
| > Question.java | <div><div></div></div> 72.0 % | 198 |
| > Quiz.java | <div><div></div></div> 81.7 % | 205 |
| com.qa.quiz.rest | <div><div></div></div> 87.2 % | 82 |
| > QuestionController.java | <div><div></div></div> 87.2 % | 41 |
| > QuizController.java | <div><div></div></div> 87.2 % | 41 |
| com.qa.quiz | <div><div></div></div> 37.5 % | 3 |
| > SQPApplication.java | <div><div></div></div> 37.5 % | 3 |
| com.qa.quiz.service | <div><div></div></div> 100.0 % | 128 |
| > QuestionService.java | <div><div></div></div> 100.0 % | 64 |
| > QuizService.java | <div><div></div></div> 100.0 % | 64 |
| src/test/java | <div><div></div></div> 98.2 % | 1,365 |

```
@Test
void CreateQuestionTest() throws Exception {
    Question question = new Question(new Quiz(), "Changed Q", "Changed A");
    Question created = new Question(2L, new Quiz(), "Changed Q", "Changed A");

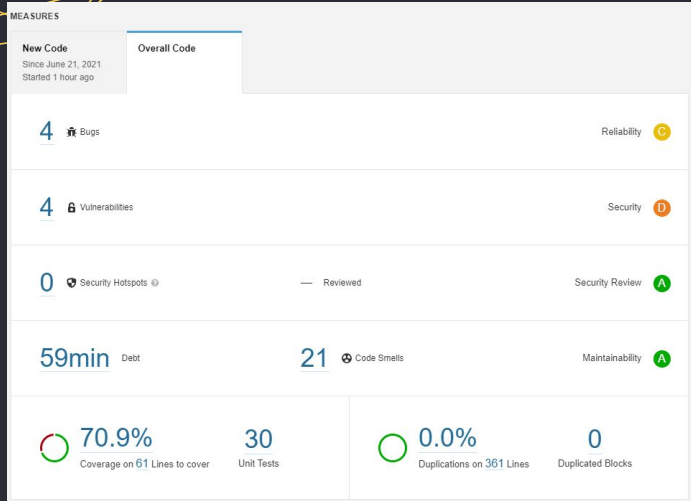
    String JSONQuestion = this.mapper.writeValueAsString(question);
    String JSONCreatedQuestion = this.mapper.writeValueAsString(created);

    RequestBuilder mockRequest = post("/question/create").contentType(MediaType.APPLICATION_JSON).content(JSONQuestion);
    ResultMatcher checkStatus = status().isCreated();
    ResultMatcher checkBody = content().string(JSONCreatedQuestion);

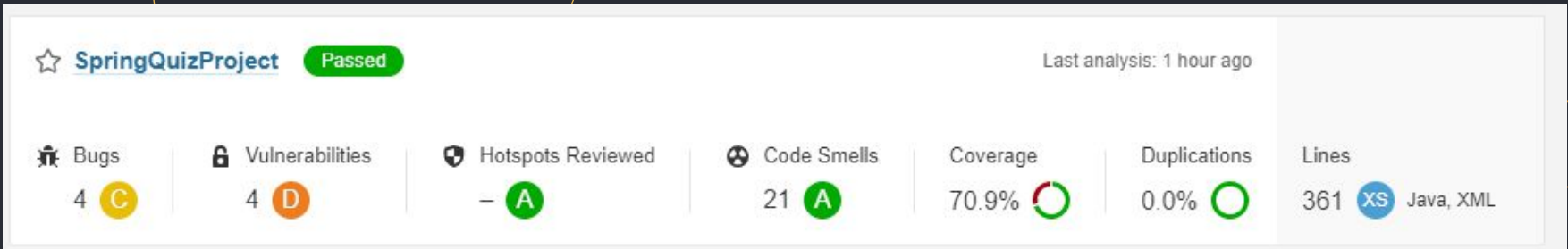
    this.mvc.perform(mockRequest).andExpect(checkStatus).andExpect(checkBody);
}
```

| | |
|----|-------|
| 5 | 8 |
| 0 | 128 |
| 0 | 64 |
| 0 | 64 |
| 25 | 1,390 |

SonarQube



Sonarqube is a tool used to perform automatic reviews/analysis of code to detect bugs, code smells, and security vulnerabilities.





Demo

