## **QAAE-Module-01**

## **Reference information**

Name of Application Under Test(AUT): Izaan App

QA Environment URL: QA

Production Environment URL: Prod

- 1. You are a Lead QA Automation Engineer in a software development company named Izaan Solutions Inc. Your developer has done some code changes and committed code in the respective branch in GitHub named develop. Your tech lead has moved the code from develop branch to QA branch. There is a CI/CD process in place that will automatically deploy the code in Izaan App QA environment (QA server). User story can be found in the project management tool VivifyScrum board <a href="User story/ticket">User story/ticket</a>.
  - 1.1. This change needs to be tested.
  - 1.2. This change of code may affect other parts of the application thus you need to do regression testing, which means you need to run some other test cases across the application so that you can be confirmed about application overall health and stability. Please create at least 20 test cases to demonstrate that those test cases shall be able to confirm the application's overall functionalities status after the change done by the developer. Attach the test plan.
  - 1.3. Bugs need to be reported using your own scrum board and shall share your board as exam outcome.
  - 1.4. Let us assume that your test went well and found the application is healthy. It's time for QA Automation Engineer to sign off the ticket and inform the team that the user story was tested and found satisfactory and the user story is ready to go to production. Your project manager has made a change request (Which an approval process to get permission to deploy code changes in production from higher management). Now it's your turn to validate the production environment by quickly running the regression test suites in the production environment. Attach the production environment regression test plan with the exam answer sheet.
  - 1.5. Chose any project (website) of your choice other than izaan.io and write at least 15 concrete test cases and create a test plan in an excel paper.



- 2. Create a Single Page Application(SPA) of your profile, where a viewer should be able to do below:
  - 2.1. Download your resume
  - 2.2. Should be able to go to your LinkedIn profile
  - 2.3. Information about yourself in About Myself section
  - 2.4. User should be able to visit your GitHub link
  - 2.5. These are basic requirements, you can add as per your interest, use HTML, CSS, or any other frontend technology to finish this task.
  - 2.6. Once your development of index.html is done deploy the code in the Amazon EC2 Linux server and attached your server public IP address with the exam paper along with the HTML document.
  - 2.7. Describe what is Client/Server Architecture?
  - 2.8. Describe what is API?
- 3. PostgreSQL Excercise
  - 3.1. Go to PostgreSQL Excercise
  - 3.2. Complete all the exercises as marked.
  - 3.3. Write all the queries in your answer paper.

## Joins and Subqueries

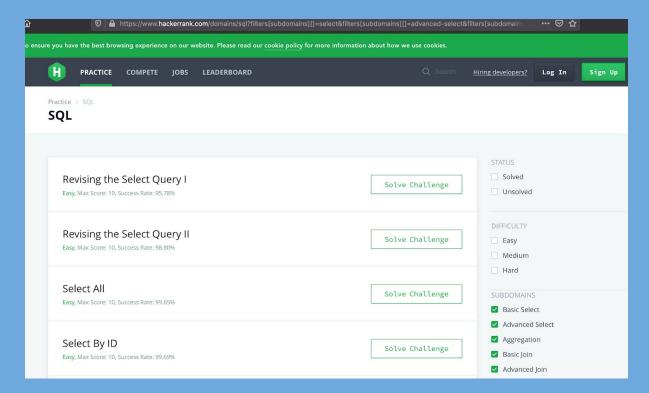


This category deals primarily with a foundational concept in relational database systems: joining. Joining allows you to combine related information from multiple tables to answer a question. This isn't just beneficial for ease of querying: a lack of join capability encourages denormalisation of data, which increases the complexity of keeping your data internally consistent.

This topic covers inner, outer, and self joins, as well as spending a little time on subqueries (queries within queries). If you struggle with these questions, I strongly recommend Learning SQL, by Alan Beaulieu, as a concise and well-written book on the subject.

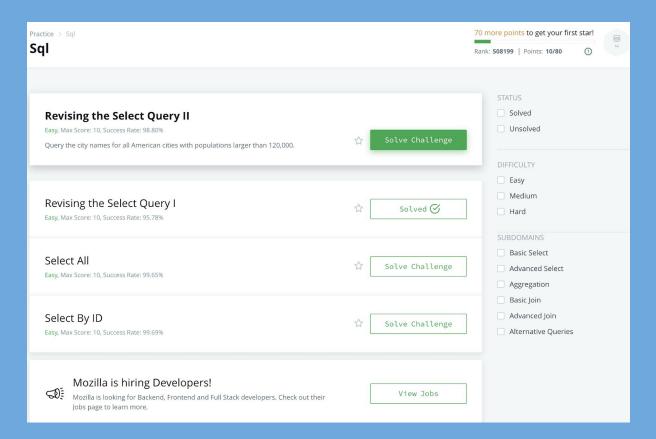
- · Retrieve the start times of members' bookings
- · Work out the start times of bookings for tennis courts
- Produce a list of all members who have recommended another member
- · Produce a list of all members, along with their recommender
- Produce a list of all members who have used a tennis court
- Produce a list of costly bookings
- Produce a list of all members, along with their recommender, using no joins.
- Produce a list of costly bookings, using a subquery
- 4. Hackerrank MySQL Challenge
  - 4.1. Click to go Hackerrank
  - 4.2. You should see below page after clicking above link





- 4.3. You have to complete all the problems as marked on the bottom right of the image.
- 4.4. Before you start solving please open an account using sign up button on your top right.
- 4.5. You can select MySQL in the IDE dropdown list(In the top right corner of IDE)
- 4.6. Once you are done take a screen capture of the score on the top right corner. Same as below





4.7. Push your screen capture in your GitHub repo and at the same time send me GitHub link.

## How to submit answers?

Share your result using your GitHub repo.

