Recipe App (QA Practical Project)

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Recipe application

- I decided to choose a recipe application for the practical project. I've always been interested in cooking and baking, and have quite a bank of recipes at home on cards or printouts, so I thought it would be interesting to create an application that has the ability to store and retrieve them.

Practical project

This 2nd practical project of the QA academy covers the following areas:

- Project Management
- Git (Version Control)
- MySQL databases
- Java (inc. use of Spring Boot)
- HTML, CSS & JavaScript (Frontend)
- Testing

MoSCoW prioritisation of user stories

QA Recipe Application – MoSCoW Prioritisation

Must have:

As a user, I want to be able to create entries for recipes in a database, so that I can add new recipes to my inventory.
As a user, I want to be able to read the entire contents of the recipe database, so that at a glance I can see all the recipes.
As a user, I want to be able to read a single recipe in the database.
As a user, I want to be able to update a single recipe in the database.
As a user, I want to be able to delete a single recipe in the database, if I am no longer wishing to have that recipe in the database.
As a user, I want a product that “just works”, so that I’m not dealing with technical issues or excessive down time.
As a developer, I want to assess potential risks at the start of the project, so that I can mitigate them or avoid them as much as possible.
As a developer, I want to document aspects of the development process, so that I can monitor progress and learn from any issues that arise.
As a developer, I want to ensure individual methods in my code are performing as expected, so that any fundamental bugs are flagged and corrected prior to further testing.
As a developer, I want to ensure the entire program is performing as expected, so that I can present it to a user without any obvious flaws.

Should have:

As a developer, I want to ensure my “recipes” and “authors” entities have been clearly thought out at the start of the project, so that I can minimise costly changes during/after development.
As a developer, I want to have exception handling.
As a developer, I want to achieve over 80% coverage of the relevant code, so that I can be confident that I am providing my customer with a robust produce that adheres to industry standards.

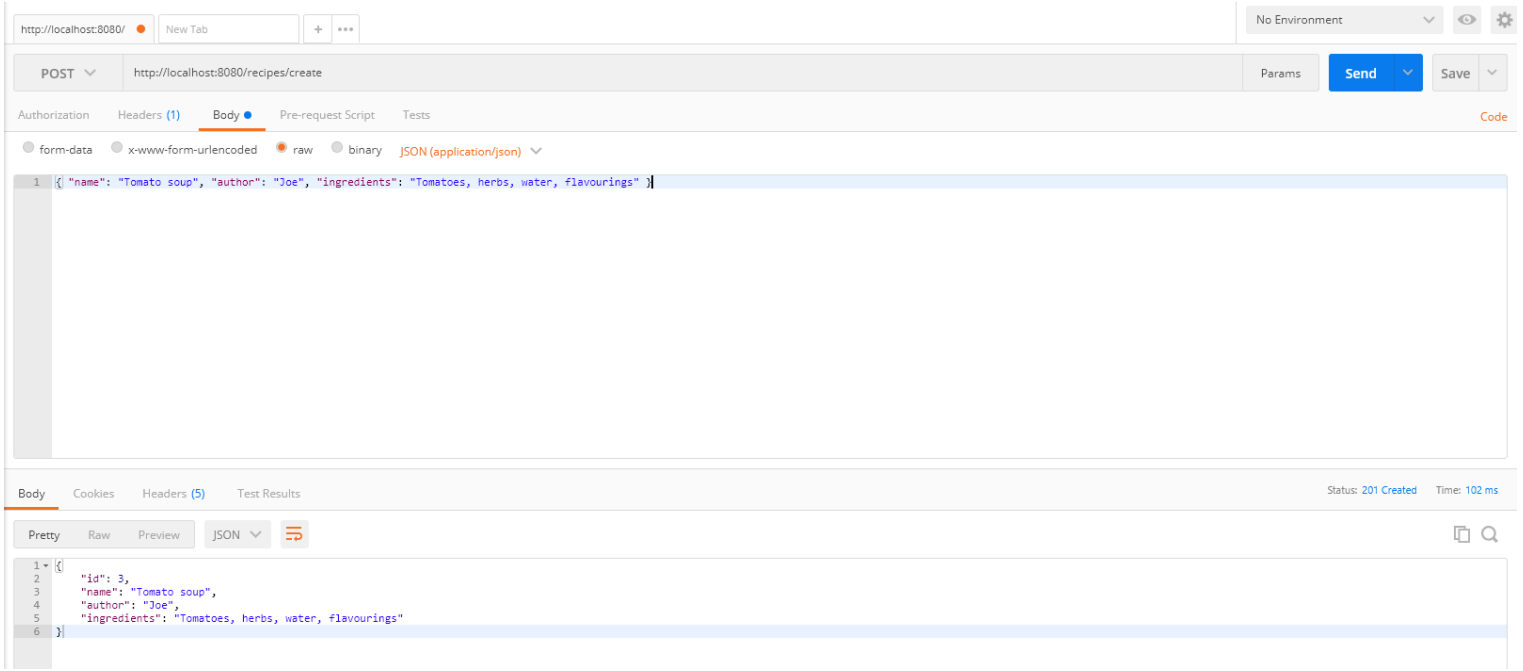
Could have:

As a user, I want the software to prevent me from entering invalid data, so that the information in the database is guaranteed to be logical and relevant.

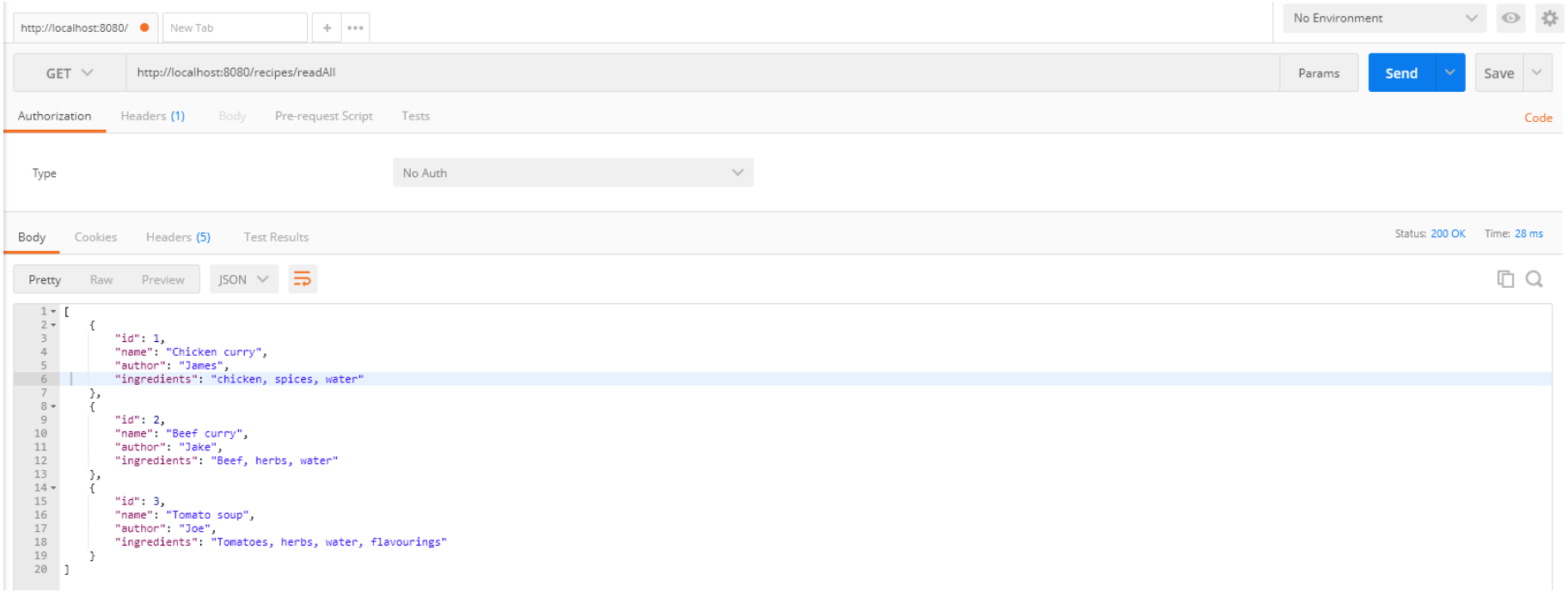
Won’t have:

As a user, I want to apply machine learning to my database, so that I can automate recipe creation/editing based on specified factors.

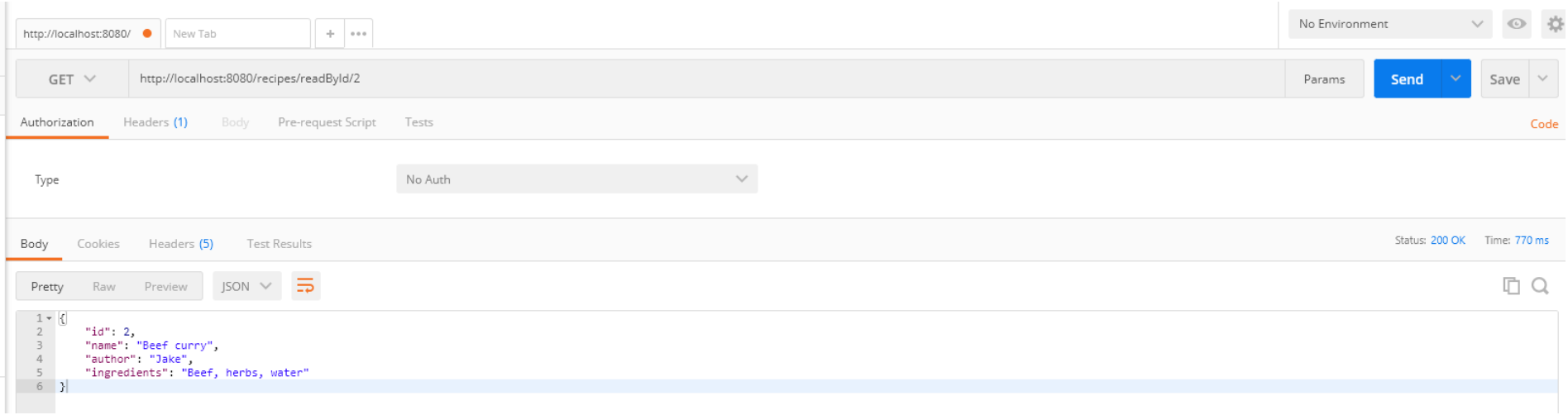
Postman API calls



Postman API calls



Postman API calls



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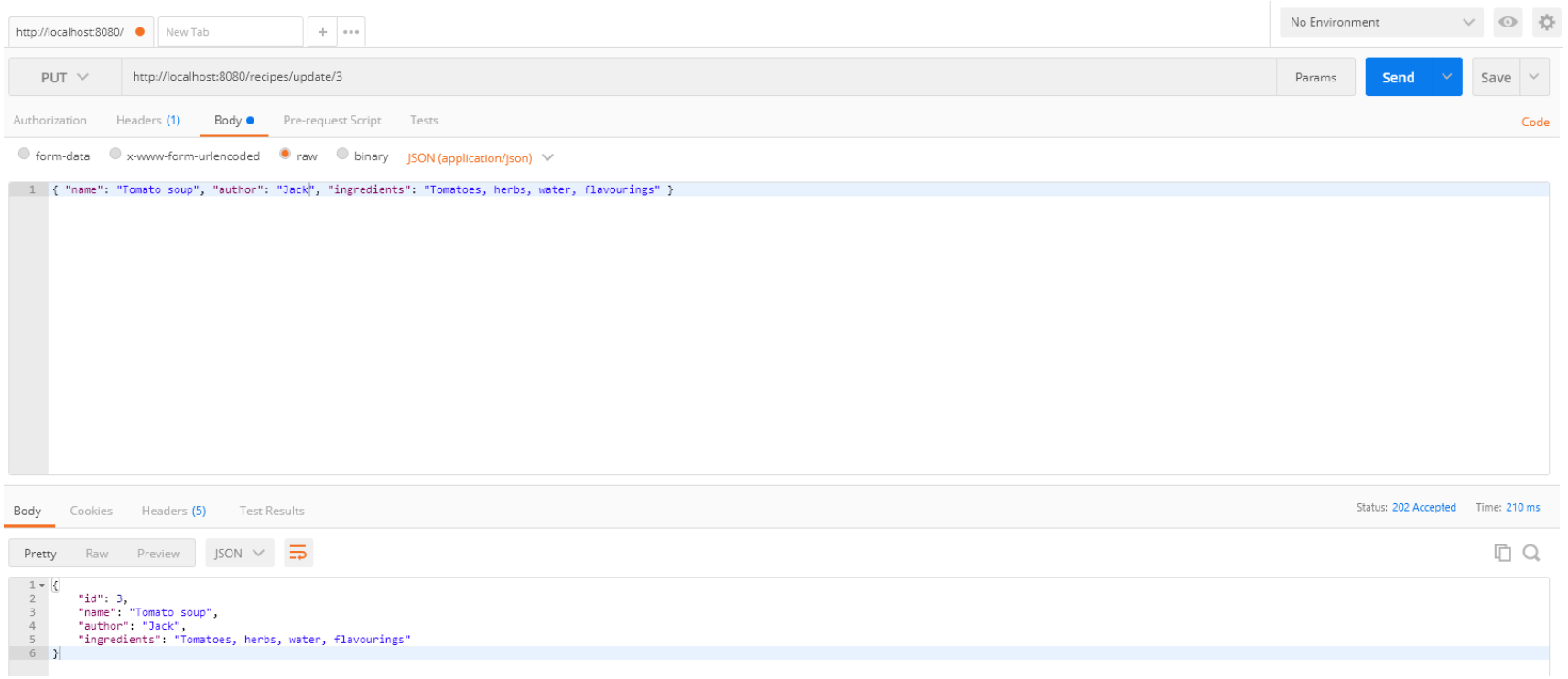
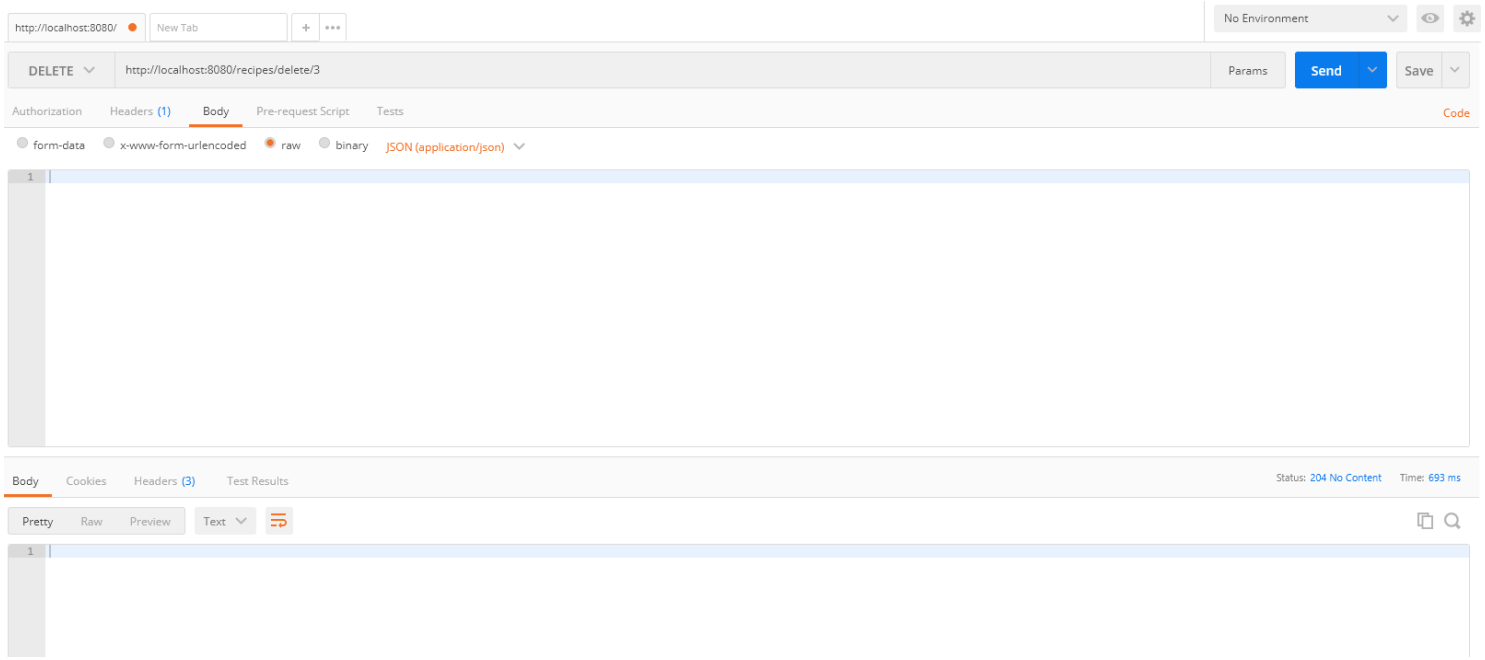
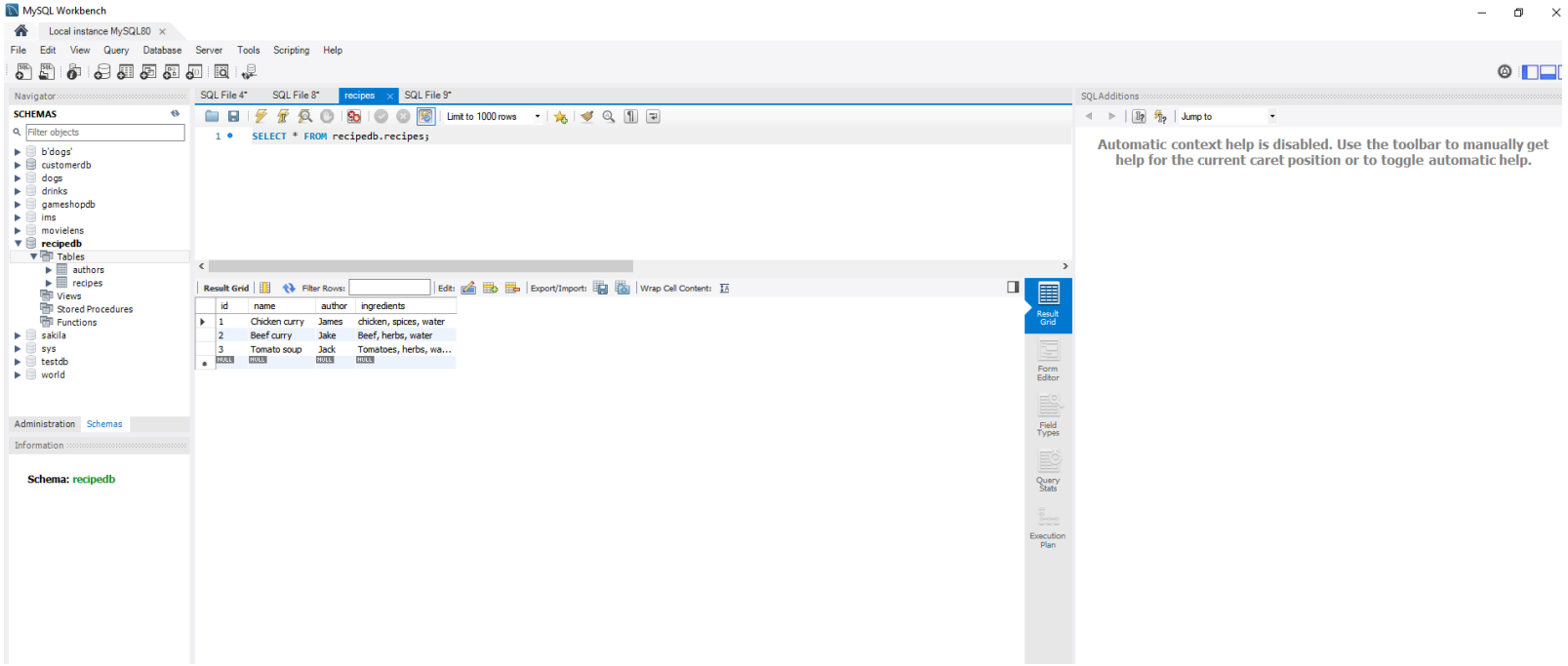


Postman API calls

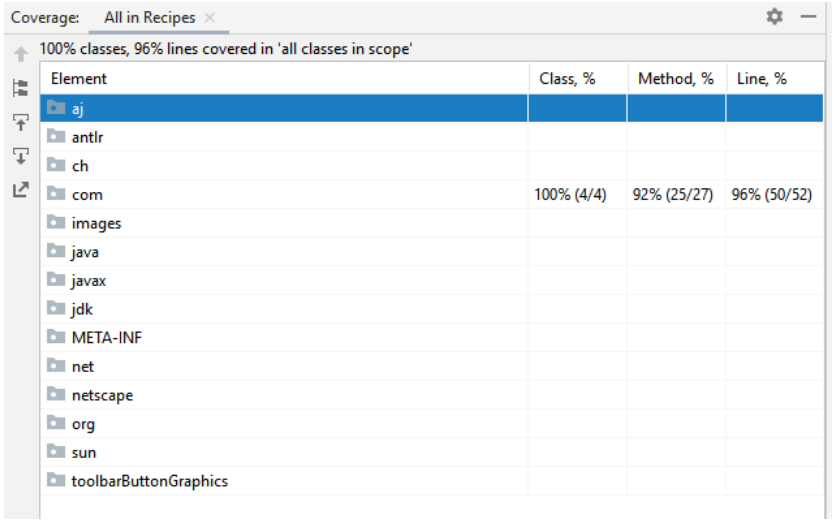


MySQL database (showing persistence of data)



Testing

- Testing was done with Junit and Mockito for unit and integration testing, H2 database was used for integration testing (see coverage report below).



Project management

- Shortcut project management system was used for user stories, and project management. https://app.shortcut.com/qaconsulting/epic/42

Sprint review and retrospective

- I somewhat struggled with backend testing, but managed to achieve good code coverage (92%).
- The frontend came out reasonably well, but I need more experience in frontend coding – this is an area that I would like to improve on in the future.
- Quite pleased with the backend, Postman API calls proved its functionality.