

GENERATING ACCESS TOKEN THEN USING IT WITH API

1

POST

REQUEST

https://library2.cybertekschool.com/rest/v1/login

KEY	VALUE
<input checked="" type="checkbox"/> email	teacher30@library
<input checked="" type="checkbox"/> password	Sdet2022*

I send post request to /login endpoint with Username and password. Then response will contain access_token.

RESPONSE

```
{
  "token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJ1c2VyIjpw7ImkIjoimTYwIiwiaXNvbnF9uYW11IjoieGVzdCBTdHVkZW50IDMwIiwiaW1hZmW1IjoieGVkZW50MzBAbGlicmFyeSIzInVzZXJfZ3JvdXBfaWQiOiIzIn0sImhhdC6MTYzNTk4MTAyMiwiZXhwIjojM4NTczMDIyfq.yNsv1Lj3bDcAZ05r04Ylc2PbS-BvphNMMa-xPTzZt0",
  "redirect_uri": "https://library2.cybertekschool.com/redirect.html?t=eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJ1c2VyIjpw7ImkIjoimTYwIiwiaXNvbnF9uYW11IjoieGVzdCBTdHVkZW50IDMwIiwiaW1hZmW1IjoieGVkZW50MzBAbGlicmFyeSIzInVzZXJfZ3JvdXBfaWQiOiIzIn0sImhhdC6MTYzNTk4MTAyMiwiZXhwIjojM4NTczMDIyfq.yNsv1Lj3bDcAZ05r04Ylc2PbS-BvphNMMa-xPTzZt0"
}
```

Now I can use this access token for other API endpoints

2

GET

REQUEST

https://library2.cybertekschool.com/rest/v1/get_book_list_for_borrowing

KEY	VALUE
<input checked="" type="checkbox"/> Accept	application/json
<input checked="" type="checkbox"/> x-library-token	eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJ1c2VyIjpw7ImkIjoimTYwIiwiaXNvbnF9uYW11IjoieGVzdCBTdHVkZW50IDMwIiwiaW1hZmW1IjoieGVkZW50MzBAbGlicmFyeSIzInVzZXJfZ3JvdXBfaWQiOiIzIn0sImhhdC6MTYzNTk4MTAyMiwiZXhwIjojM4NTczMDIyfq.yNsv1Lj3bDcAZ05r04Ylc2PbS-BvphNMMa-xPTzZt0

Once I have the Access token, now I send that access token To other Api endpoints/URLs as a part of the HEADER.

RESPONSE

```
[
  {
    "id": "2892",
    "name": "(noname) - 1989",
    "disabled": "1"
  },
  {
    "id": "2892",
    "name": "(noname) - 1989",
    "disabled": "1"
  }
]
```

Token represents data about the user that it was created from. We can read or convert the token into json using <https://jwt.io> Or using java libraries.

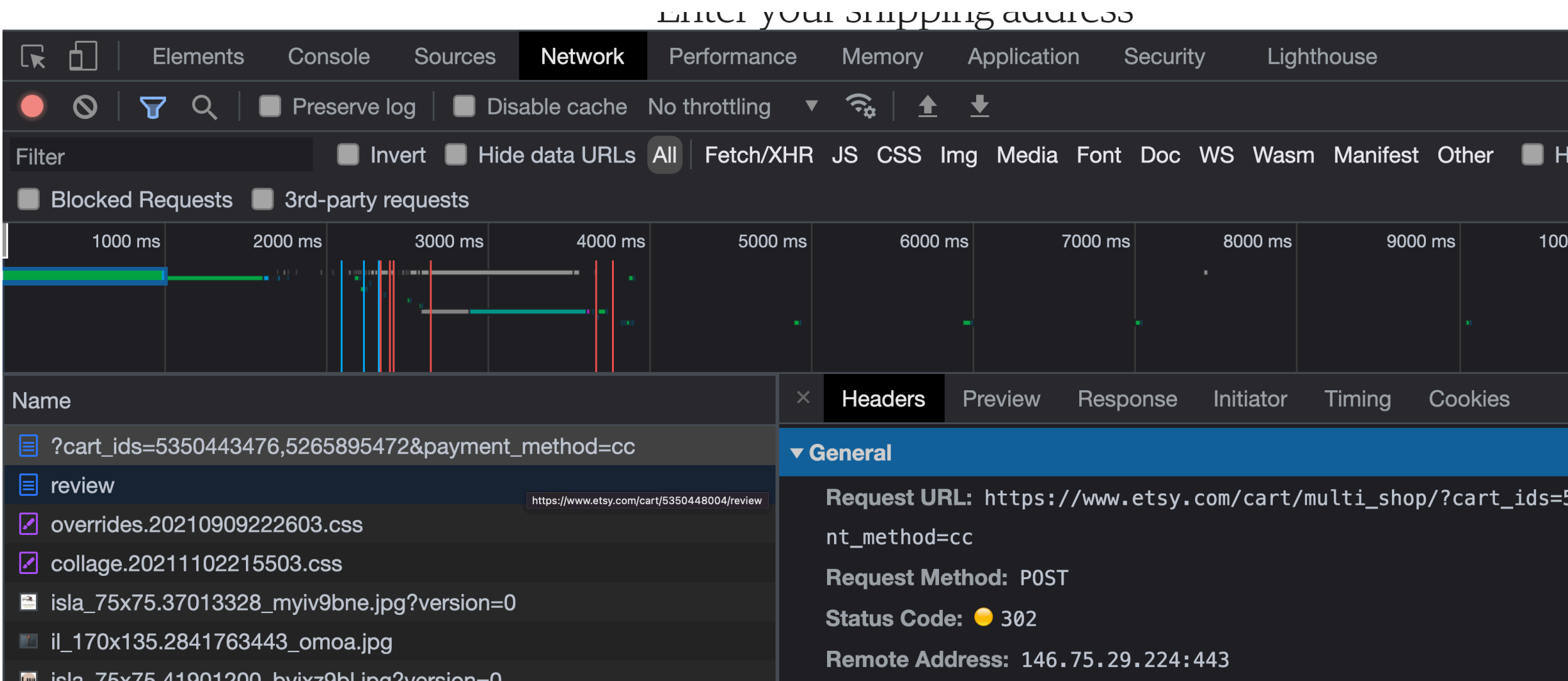
API/APP NOT WORKING AS EXPECTED. WHAT YOU DO NEXT?

It is recommended to do your investigation before logging the defect:

Look at network tab in chrome developer tools



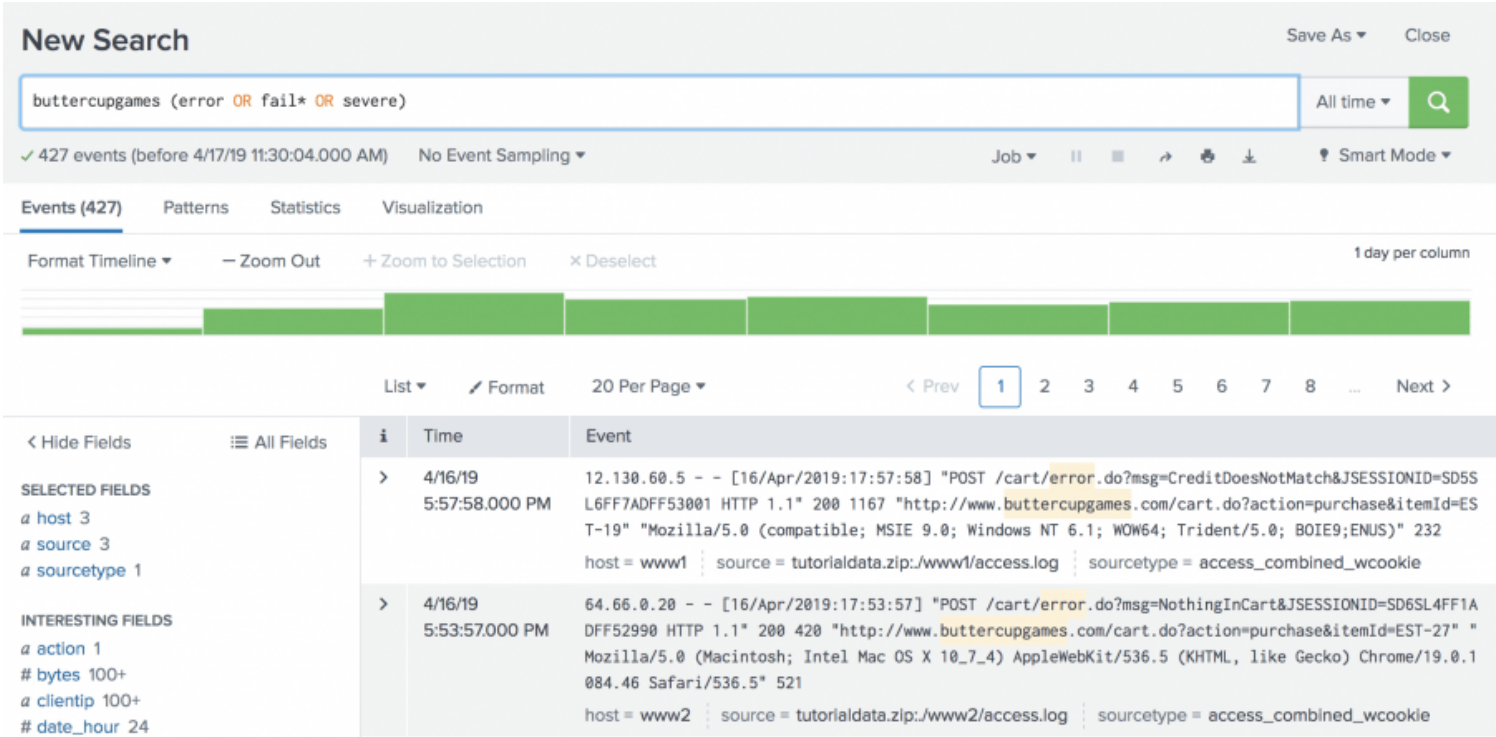
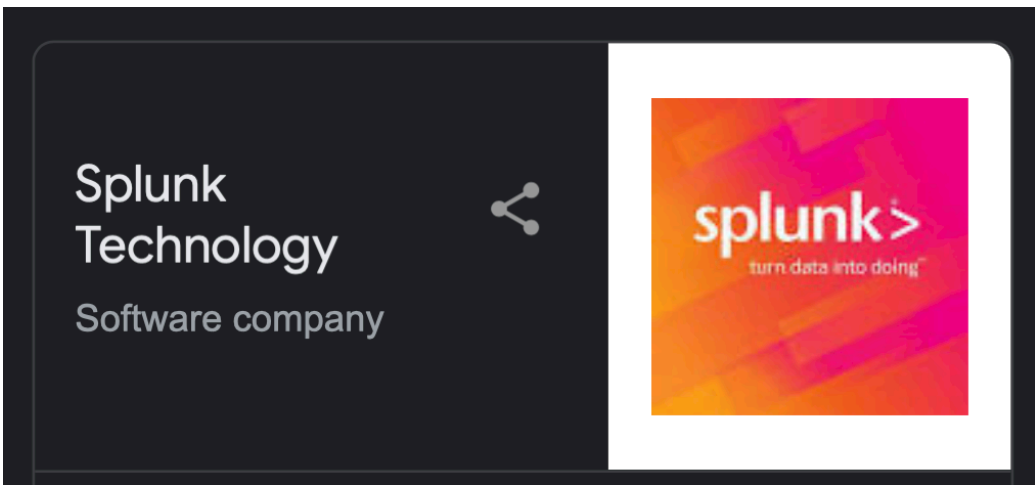
See if any request or step shows error

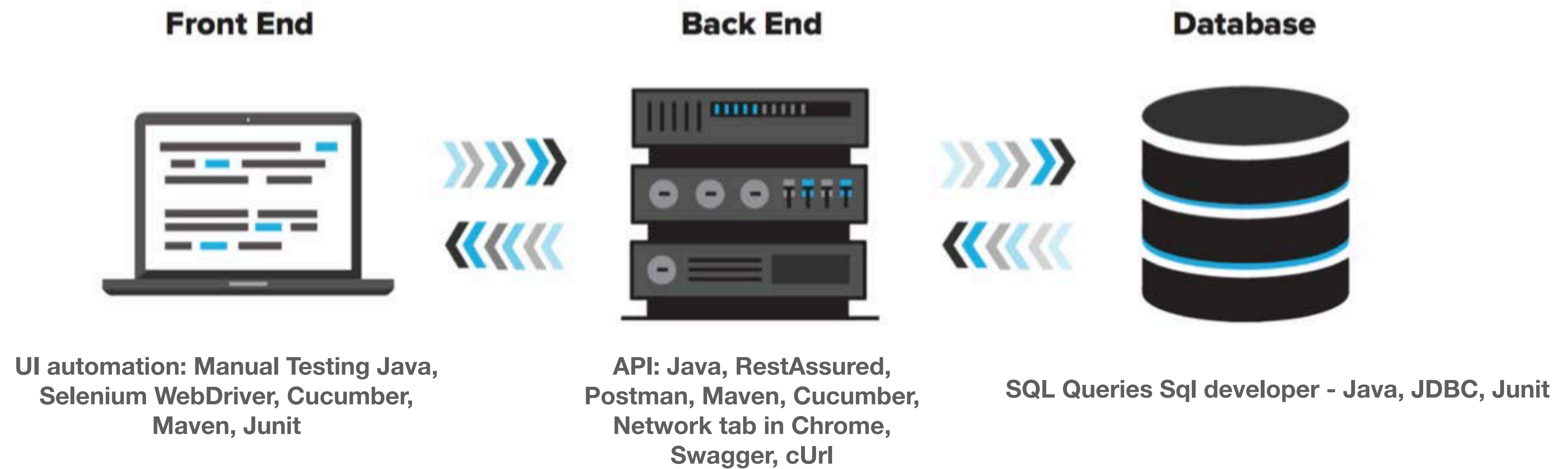


API/APP NOT WORKING AS EXPECTED. WHAT YOU DO NEXT?

If there is no front end to check the network tab steps. I would go through the LOGS of the application.

We use Splunk for application log analysis and searching. I write splunk query to see all the logs for the user
And try to find out what is the issue.

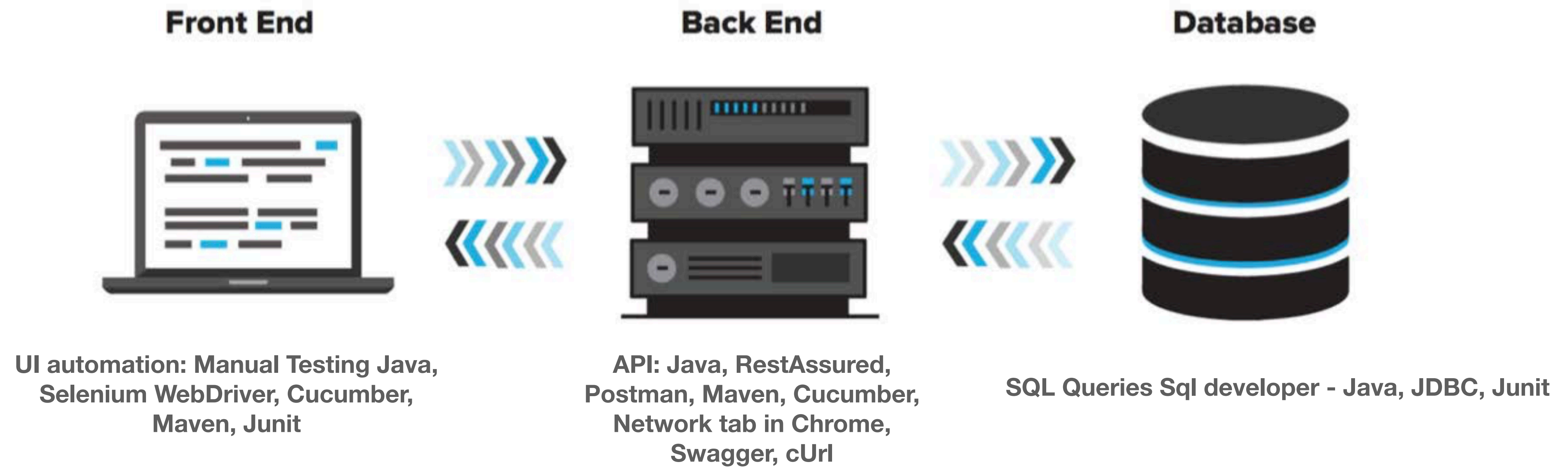




I specialize in Full Stack Test Automation, for UI, I do manual testing and automation using Java,, Selenium WebDriver, Cucumber BDD , Maven, Unit etc.

I do Rest Api Testing manually using Postman then automation using Rest-Assured library in Java. For documentation and learning About API endpoints I use Swagger or Network tab in Chrome.

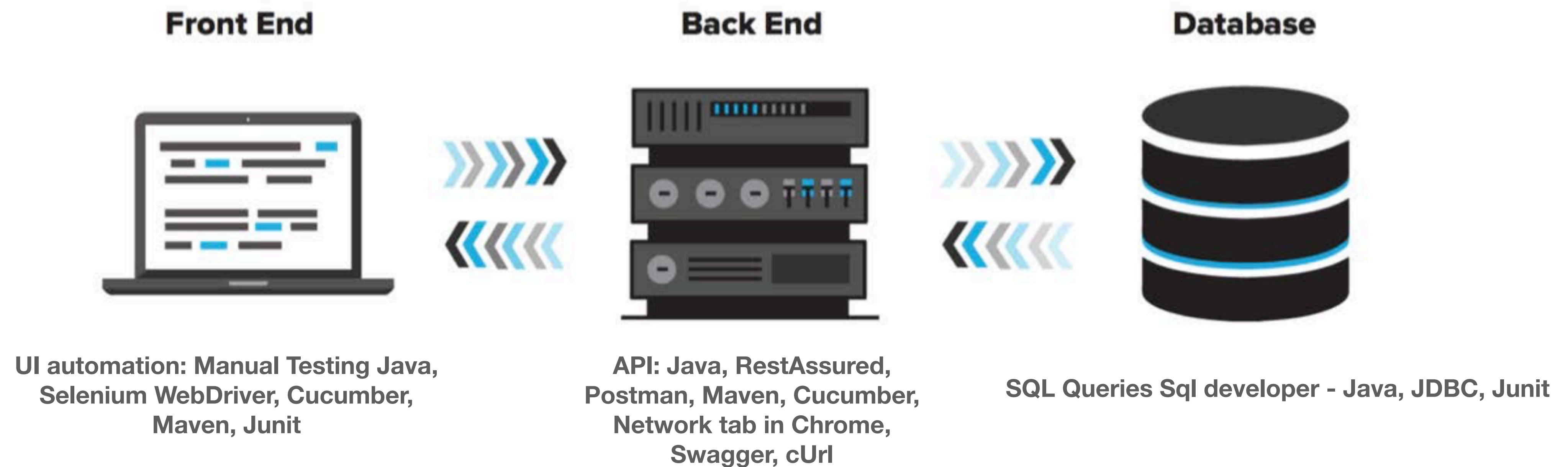
For database testing, I have experience with working on Relational Databases like Oracle, MySlq, And I am good writing SQL queries using DDL and DML commands and verifying the data. For Automation of Database verifications I use java, JDBC library along with ofc JUnit for assertions



What are the main challenges faced in API testing?

- In My project, our application and Rest API have several dependencies on external Rest APIs being up and running. So sometimes I have Challenge to properly execute and test my Rest Api and the Application end to end.
Did you do anything about it? Yes, I requested a MOCK environment where all external API calls are MOCKED using WireMock.

<http://wiremock.org>



What are the main challenges faced in API testing?

- In My project, I have automation Full End to End Automation Scenarios, where I have to test the application from all layers.
- My automation code goes to UI and posts some data and does some processing then Right away, I need to send request to API To see if my changes from UI are in the API response

I have to compare and VALIDate large amount of data between UI wettable and API Json and also SQL resultset. So it was a challenge to be able to automate data validation because of volume and data formatting differences.

- I wrote many utility reusable methods with Java Data structures and collections to validate the data.

UI Webtable data -> Read using Selenium WebDriver —> Store the data into a List of Maps

Rest API Json data -> Read that using JsonPath or De-serialize it to another List of Maps

SQL Resultset object -> Read that using JDBC library -> Loop through and store into Another List Maps ->

List<Map<String, Object>> data = new ArrayList<> ();

Then I compare them and report any mismatches.

I also wrote many POJO classes to match data ON UI, API, and DATABASES and use extensively in my framework.