**TECHNICAL TASK DOCUMENTATION**

**Tools used**

1. Docker to get the container items.
2. Postman for send Request and validate response using tests.
3. Newman to run the collections and parameterize .csv file and generate html reports.
4. Make file to run the tests

**Tasks Done**

1. Docker container is named to sbg-tech-test-app as per the requirement.

Docker image is first pulled and then run using the command “docker run -p 4000:4000 --name sbg-tech-test-app ngr05/sbg-gaming-seit-tech-test” which will redirect the port 4000 of the docker to localhost port 4000 and named as sbg-tech-test-app. Then checked the container is up and running by giving the url in the browser.

URL : <http://localhost:4000/graphql>

1. Query the Game by passing valid “id” as input argument

In GetGame API ,request is sent and the corresponding status and response related to the id passed is verified by writing test scripts.

1. Query the Game by passing invalid id as input

In Get\_GameWith\_Invalid\_Id API, an invalid id is passed as key and checked the status response code its showing 200 and error message is displayed. I felt the error message can be clearer. Have covered different test data for id to cover negative test cases.

1. AddGame(mutation) by passing name, slug, supplier as input.

Prepared parameterize test data to include name, slug and supplierId as key columns. When test is executed through newman (postman tool to run tests on command line) the game is added successfully, test script is designed to validate status code and data added into the backend with input/test data file.

1. AddGame(mutation) - check if the supplier id added is same as in the input/data file.

Add Game (Add\_Game\_SupplierNotMatchingToDataFile) request is sent to verify if the supplier id in the data file matches the supplier id got in the response. To do this supplier id is passed using data file.When I pass supplier id as 2 the and checked the response the supplier id is coming as 1. Have written the test script to validate the same.

**Steps to run the Test (all these steps are followed to run tests in windows platform)**

1. Install Newman, HTML extra using npm.
2. Copy Makefile to the root folder.
3. Copy all data files (\*.csv) to the same folder as Makefile.
4. Copy test-reports to the same folder as Makefile .
5. Copy Sbg\_game.postman\_collection.json to the same folder as Makefile.
6. Choco make is installed by giving the command “choco install make” to run the tests using make file.
7. Tests can be run by giving “make test” command in the gitbash (please find **Makefile** file for details)
8. Reports can be found in the test-reports folder.
9. I have attached the reports generated during my test execution.

**Bugs Identified**

1. If supplier (id = 2) is passed using data file in AddGame API and compared with the supplier id in the response code (id = 1) was not matching. Supplier id is changed to 1 everytime when new game is added for supplier 2.
2. While doing sanity test (manual tests) I was able to add duplicate game names for same supplier but on update it will give error.