

Shipt - QA Engineer - Interview Exercise

Upon completion of this exercise, push all your files into github and send us a link.

1. Navigate to www.shipt.com. Choose a feature of the site and write a description or test case to describe how to test the feature.
2. Locate one bug or bad workflow within the app.
 - a. Explain the behavior you are seeing
 - b. Include any useful errors or screenshots
 - c. Explain why and how it needs to be corrected
 - d. What are the steps you would take to report the issue?
 - e. What priority would you give this bug (Scale of 1-5, 1 being highest) and why?
3. What are the possible reasons for the following defect? How would you go about debugging the problem and gathering more information?

On a web application, a user adds a phone number to their account. The user then changes the phone number. Upon trying to re-enter the first phone number, the user is allowed to click Save, and it seems to work, but the saved number remains the second number rather than updating to the more recently entered number. A page refresh does not change the result.

SQL

Using the following schema, write SQL statements to answer the questions below:

```
create schema interview;

Create table interview.stores (
id integer,
name text,
allowed_alcohol boolean
);
Insert into interview.stores values (1,'Gettar',true);
Insert into interview.stores values (2,'Waysafe',false);

Create table interview.products (
id integer,
name text,
upc text,
created_at date
);
Insert into interview.products values (1,'Apple', '123', '2018-01-01');
```

```
Insert into interview.products values (2,'Banana', '456', '2018-01-02');
Insert into interview.products values (3,'Grapes', '789', '2018-01-03');
Insert into interview.products values (4,'Golden Banana', '456', '2018-02-04');
Insert into interview.products values (5,'Bouquet Flowers', '9213123', '2018-02-05');
```

```
create table interview.store_prices (
  id integer,
  product_id integer,
  store_id integer,
  price numeric
);
Insert into interview.store_prices values (1,3,1,2.59);
Insert into interview.store_prices values (2,2,1,3.32);
Insert into interview.store_prices values (3,4,1,3.59);
Insert into interview.store_prices values (4,3,2,2.34);
Insert into interview.store_prices values (5,1,2,1.56);
```

```
create table interview.order_lines (
  id integer,
  product_id integer,
  store_id integer,
  qty integer,
  line_total numeric
);
Insert into interview.order_lines values (1,1,2,3,NULL);
Insert into interview.order_lines values (2,2,1,50,NULL);
Insert into interview.order_lines values (3,2,1,1,NULL);
Insert into interview.order_lines values (4,3,2,4,NULL);
```

1. List me the stores allowed to sell alcohol
2. Give the product name of the 2 most expensive items based on their price at store id 1
3. List the products that are not sold in the store id 2
4. What is the most popular item sold?
5. Write a SQL statement to update the line_total field

Automation Assessments

We recommend you choose from the following languages/tools. Feel free to use other tools if you feel they lend better to this type of testing. Please try to do both automation assessments listed below. Partial completion still counts for something, so please do what you can for both parts.

UI Automation

Write an automated test which accomplishes the following

1. Access www.shipt.com in the browser
2. Using the feature you chose for step 1, write an automated test
3. The test should validate the feature works as expected

We recommend you choose from the following languages/tools. Feel free to use other tools if you feel they lend better to this type of testing.

- Selenium
- Calabash
- Typescript/Javascript
- Ruby

API Automation

Using the Star Wars API <https://swapi.co/documentation> write a test that does the following:

- Assert that Obi-Wan Kenobi was in the film A New Hope
- Assert that the Enterprise is a starship (yes, this should fail)
- Assert that Chewbacca is a Wookiee
- Assert that the /starships endpoint returns the fields below:
 - name
 - model
 - crew
 - hyperdrive_rating
 - pilots
 - films
- Assert that the /starships count returned is correct by paging through the results

Feel free to use any language or helper package, but refrain from using tools such as Postman. Please provide documentation on executing your automation and setting up any dependencies.

Recommended languages we use are below:

- Python/Pytest
- Ruby/Rspec

- Go/Testify

Good assessments will have:

- Dependency management
- How to run documented in a readme
- Clear test failure messages
- Some reusable code on common actions (ex, logging or sending the HTTP request, interacting with browser)
- A GitHub repo

Above and Beyond for API:

- Setup a mock server that uses the same request/response schemas as the real API and run the same tests

Automation Assessment Follow Up Questions:

1. If you chose to use a tool or language other than the recommended, briefly explain why.
2. How did you go about locating the elements for your tests?
3. What do you believe are the most common causes for instability in UI automation?
4. How do you make your tests consistent and easy to debug?