**QA Trainee test form**

*April 2017*

Specify your full name: Ivan Yakimchyk

*Please, provide the answers on the questions below:*

* What did you graduate from (+ year of graduation)?

2000-2005 National Transport University.

* Specialist’s degree;
* Specify your current occupation and main duties:

Position: Service engineer;   
Responsibilities:  
▪ Beta testing of the printer software and utility software;(Oce Technology).

* What are your hobbies?

1. Reading.
2. Fishing.

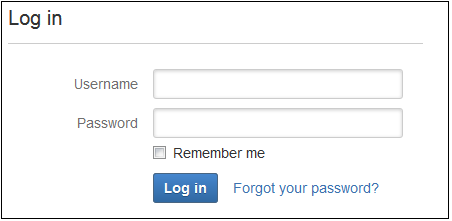
* Do you play computer games? Which ones?

No.

* Why did you choose QA?

1. With the help of knowledge and skills to do something better today so that someone could use it tomorrow with pleasure.
2. Possibility of permanent development.

1. You need to create a **check-list**  for the login form. Please, divide the list by different testing types with at least 2 verifications for each type.



2. Create detailed **Test Case** on the one of verification that you’ve described in #1.

3. Provide the criteria of good requirements you know.

Requirements for the system being developed should have the following characteristics:

1. Unambiguousness;
2. Verifiability;
3. Clarity (brevity);
4. Accuracy;
5. Clarity;
6. Feasibility;
7. Independence;
8. Atomicity;
9. Necessity;
10. Abstractness.

4. You received the requirements to the login form to the Web site: ”*Only registered users must be able to login to the system successfully.*”  
Is it a good or bad requirement? Why?

The requirements are incomplete. You must additionally specify the parameters of the user registration, provide the layout of the corresponding page with a detailed description of the required fields (field length, data type ..) Accordingly, provide a page layout login with the presence and location of all buttons and fields. Provide information about the welcome page after a successful login

5. Which of the following best describes **Integration testing**?  
*Emphasize the correct answer.*

1. testing to verify that a component is ready for integration
2. testing performed to expose faults in the interfaces and in the interaction between integrated components
3. testing to verify that the test environment can be integrated with the product
4. integration of automated software test suites with the product

6. Assume postal rates for 'light letters' are:   
 • $0.25 up to 10 grams  
 • $0.35 up to 50 grams  
 • $0.45 up to 75 grams  
 • $0.55 up to 100 grams

Which test inputs (in grams) would be selected using **boundary value analysis**?   
*Emphasize the correct answer.*  
a. 25, 26, 35, 36, 45, 46, 55, 56  
b. 10, 50, 75, 100, 250, 1000   
c. 0, 1, 10, 11, 50, 51, 75, 76, 100, 101   
d. 0, 9, 19, 49, 50, 74, 75, 99, 100

7. If you take the train before 9:30 am or in the afternoon after 4:00 pm until 7:30 pm ('the rush hour'), you must pay full fare. A saver ticket is available for trains between 9:30 am and 4:00 pm, and after 7:30 pm.

What are the partitions and boundary values to test the train times for ticket types? Which are valid partitions and which are invalid partitions? What are the boundary values? (A table may be helpful to organize your partitions and boundaries.) Derive test cases for the partitions and boundaries.

Are there any questions you have about this 'requirement'? Is anything unclear?

**Full fare**

9:30 16:00 19:30

**Saver ticket**

9:30 16:00 19:30

We define the equivalence classes:

1. time of travel <9:30
2. 16:00> driving time> 9:30
3. 19:30> Travel time> 16:00
4. travel time> 19:30

Boundary values:

1. 9:29/9:30/9:31
2. 15:59/16:00/16:01
3. 19:29/19:30/19:31

### 8. You need to create the Bug Report with all necessary details. Issue details: You’ve added a few items into the Shopping Cart. Each of them has its ownprice. As a result Total Amounthas extra 1cent on the Order Confirmation page.

### Bug Report

|  |  |
| --- | --- |
| **Project** | QA Trainee test form |
| **Issue Type** | Bug |
| **Summary** | On the order confirmation page, the counter of the total amount of goods increases the value by 1 cent |
| **Severity:** | Critical |
| **Assignee :** | Matvey Dyadkov |
| **Reporter:** | Ivan Yakimchyk |
| **Environment:** | Win 8.1; Google Chrome 49 |
| **Description** |  |
| **Precondition:** | The browser is running and the internet shop is open in menu things |
| **Steps to reproduce:** | 1. choose the things 2. push button " Buy" 3. Repeat steps 1-2 4 time 4. press on a link " Shopping Cart " 5. open the "Order Confirmation page " |
| **Actual result:** | On the order confirmation page, the counter of the total amount of goods increases the value by 1 cent |
| **Expected result:** | On the order confirmation page, the merchant amount counter shows the correct total cost of purchases |
| **Attachment:** |  |

9. Describe, what is the bug’s **severity** and who specifies it?

Severity:

The degree of impact that a defect has on the development or operation of a component or system.

Severity can be of following types:

1. Critical;
2. Major;
3. Minor;
4. Trivial.

When exposing a severity, the tester evaluates the impact of a defect on the work of the application.

10. Describe, what is the bug’s **priority** and who specifies it?

Priority:

Priority defines the order in which we should resolve a defect. Should we fix it now, or can it wait?

1. Low;
2. Medium;
3. High.

Priority - This tools manager planning work.

11. Create an **SQL query**, which provides all *Customers’ Names* and their *Country*, where *Country* contains letter ‘o’ and *PostalCode* is equal to value *5023*, order them by B*illAmount*.

Table name is **Customers**.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **CustomerName** | **BillAmount** | **Address** | **City** | **PostalCode** | **Country** |
| 1 | Alfreds Futterkiste | 85 | Obere Str. 57 | Berlin | 12209 | Germany |
| 2 | Ana Trujillo Emparedados y helados | 99 | Avda. de la Constitución 2222 | México D.F. | 5021 | Mexico |
| 3 | Antonio Moreno Taquería | 450 | Mataderos 2312 | México D.F. | 5023 | Mexico |
| 4 | Around the Horn | 35 | 120 Hanover Sq. | London | 5023 | UK |
| 5 | Berglunds snabbköp | 105 | Berguvsvägen 8 | Luleå | S-958 22 | Sweden |

Select CustomerName, Country, BillAmount

From Customers

Where PostalCode=5023 and Country like '%o%'

Order them by BillAmount

12. Write the Block Scheme (diagram) of the **program**, which prints *odd* numbers from 0 to 1000.   
**OR** (c*hoose only one option*)Code the **program**, which prints *odd* numbers from 0 to 1000 using any programming language (or pseudo-code).

for num in range(1000):

if (num & 1) == 1:

print(num)

13. <http://www.example.com/all_members.php?name=Dima&bill=100&year=2015#contact_us>

13.1 What http method is used in this example?  
13.2 What is URI, URN, URL (outline and add comments to the example line)  
13.3 Extend the request with *surname* and any value  
13.4 What # sign in the example means?

14. What is the degree between watch’s arrows if it’s 11:40. Describe the flow of your solution.

The total number of divisions (minutes) in the circle is 60. 1 division = 360/60 = 6 degrees in one minute for the big arrow. For 40 minutes (divisions) the arrow will pass 40 \* 6 = 240

1 hour (60 min) is 5 divisions. The small arrow for 40 minutes will pass 3.33 (40 \* 5/60) dividing from the 11 o'clock mark and take the position (55 + 3.33) \* 6 = 349.98 = 350 degrees. Hence the angle between the arrows is 350-240 = 110 degrees

15. If  
2 = 6  
3 = 12  
4 = 20  
5 = 30  
6 = 42  
then 9 = 72

Describe the flow of your solution.

16. Please, describe the usage of linux commands below and write down additionally 4 more with their purposes explanation.

1. Ls - Display the contents of the current directory
2. Mkdir - Create a directory
3. Mv - Rename
4. Sudo - Allows users to execute commands on behalf of the superuser root or other users.
5. Pwd - Show the current directory
6. Man - Call the program's manual
7. Ls - Display the contents of the current directory
8. Cp - Copy all files
9. Gzip - squeezes a file
10. Find - Find files

17. What is HTML. What is the purpose of using it?

HTML is the markup language for hypertext documents. In other words, he is responsible for the location in the document of texts, drawings, tables .. intended for life on the Internet

18. What is XML. What is the purpose of using it?

XML (eXtensible Markup Language) is a document description language, much like the HTML hypertext markup language, but much more universal than HTM. The goal of CML is to ensure compatibility when transferring structured data between different information processing systems, especially when transferring such data via the Internet

19. What roles in Scrum do you know? What Scrum meetings do you know (describe with details the purpose of each meeting)?

In the classical Scrum there are 3 basic roles:

-Product owner

-Scrum master

-Development team

Additional roles (Ancillary roles) in the Scrum methodology

Users (Users)

Clients, Sellers (Stakeholders) are the persons who initiate the project and for whom the project will be profitable. They are involved in the skram only during the sprint review meeting.

Managers are people who manage personnel.

Consulting experts

**Agile Scrum Meetings**

1. Sprint Planning Meeting

Timings:

* Before every Sprint
* Duration:
* 4-8 hours

Artifacts:

* Sprint Tag/Goal, sprint backlog, tasks

Participants:

* Scrum Owner, Scrum master, Scrum Team

2. Release Planning Meeting

Timings:

* Beginning of each release or revised during the release

Duration:

* 4 – 16 hours

Participants:

* product owner, scrum master, scrum team

Artifacts:

3. Review Meetings

A. Sprint Review (Demo) Meeting

Timings:

* After sprint completion.

Duration:

* 2 hours

Participants:

* Product owner, customer, scrum team

Artifacts:

* completed features.

B. Sprint Retrospective Meeting

Timings:

* After Sprint Review meeting

Duration:

* 2-4 hours

Participants:

* Scrum Team, Scrum Master

Artifacts:

* better processes and practices.

4. Daily Stand-up Meeting

Timings:

* Daily

Duration:

* 15 minutes

Participants:

* Scrum master, scrum team (other can participate as a silent participants)

20. Please, automate the next scenario:

1. Go to the website http://the-internet.herokuapp.com/

2. Find the item in the list of examples: Form Authentication

3. On the Login Page enter username and password to authorize

4. At the end of the test make a screenshot of successful authorization

The test should run on Chrome Browser.

For solving this task you can use any programing language

from selenium import webdriver

from selenium.webdriver.common.keys import Keys

driver = webdriver.Chrome()

driver.get("http://the-internet.herokuapp.com")

driver.find\_element\_by\_xpath("""//\*[@id="content"]/ul/li[18]/a""").click()

# user credentials

username = driver.find\_element\_by\_xpath("""//\*[@id="username"]""")

username.send\_keys('tomsmith')

password = driver.find\_element\_by\_xpath("""//\*[@id="password"]""")

password.send\_keys('SuperSecretPassword!')

login = driver.find\_element\_by\_xpath("""//\*[@id="login"]/button/i""").click()

driver.implicitly\_wait(10)

driver.save\_screenshot("file.png")

driver.quit()

Load your code on github and attach the link to the file.