Software All-Encompassing QA Test Project

Department Of Software QA



QA File for kariyer.baykartech.com, file includes Automation and Manual tests. Written by Berkant Yüksektepe. My area of expertise is Test Automation, but I still performed it in manual testing for some test cases that could not be performed in Automation Tests.

Automation tests are written with Robot Framework @SeleniumLibrary in Python environment. You can find the source code links at the end of the document. Automated tests are Designed for be Easy-To-Read, Easy-To-Maintain, Easy-To-Understand.

User Guide

First of all you need a Python environment for run Robot Framework Automated tests. I use Python 3.9 and pip 21.2.4 with conda in this project. I also use PyCharm as IDE.

Clone the project from github use these commend in terminal: "git clone https://github.com/Berkantyuks/QA-Test-Automation-Baykar.git" in to the directory you want.

After cloning repo you need install Chrome Driver for execute tests.

Go to this address: https://chromedriver.chromium.org/ and Download the driver that matches your chrome version. Move downloaded chrome driver to "c:/driver/(if not exists create a "driver" folder in c:/)" directory. In Windows go to Environment Variables then double click "Path" variable and click new button then type "c:/driver" and hit enter.

For install all requirements go to base project directory and type "pip install -r requirements.txt". That's it! Ready to run.

For Manual tests, its just hand writed Excel file. You'll need read test case by following step numbers.

Execute Automated Tests

Prepare variables after execute tests. You'll need to go Tests folder in base directory then click "Tests/Kariyer.Baykartech.robot" file. This file is main test suite for Baykar's Kariyer website.

```
*** Variables ***

${SITE_URL} = https://kariyer.baykartech.com/ # [!] DO NOT CHANGE SITE URL [!]

${BROWSER} = chrome # add browser driver in env. path before first run

${RUN_LANG} = tr # "tr" or "en" [!] lowercase [!]
```

Do not change the variable SITE_URL because all tests are based on this url. If you want different browser for running tests, you can change BROWSER variable. RUN_LANG variable is Runtime Language. This site has a two language support. If you type "en" to this variable, the tests will take place on English pages. Type "tr" for Turkish pages. It's that simple.

Test execution commands. Now it's time to run, type in terminal these command: "robot -d results tests", this command will execute all test cases in Tests folder then saves results in Results directory. You can use tags to run only one test case.

```
*** Test Cases ***
Visitor should be able enter site
   [Documentation] All visitors should be able enter site
   [Tags] Smoke Common
   Open Website ${SITE_URL}${RUN_LANG}
   Common.Verify Page Loaded ${RUN_LANG}
```

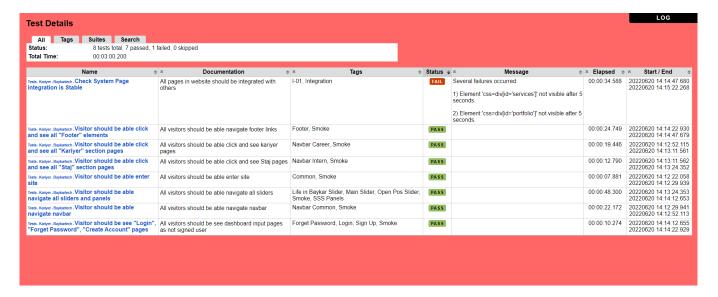
Let's take the test case above as an example. Smoke and Common tags are defined this case. If you write this command in terminal: "robot -d results -i "Common" tests " it just run Common tagged test case in Tests folder. Or execute a test by case name, in terminal: "robot -d results -t "Visitor should be able enter site" tests " its runs by test name.

Automated Test Results

Let's see tests results. Test results are saved in the Results folder. These are divided into two as Report and Log. The report file gives brief information about the test results. The log file, provides every detail about the tests performed.

Tests | FAIL | 8 tests, 7 passed, 1 failed

After execution, terminal says 8 Tests we have, 7 passed, 1 failed. Let's take a closer look, starting with the report file.



As you can see the report page is red. This happens because it failed a test. Integration tests are failed. This fail is not caused by automation. There are some problems in the site. In addition, we see that all other smoke tests have passed. It shows that simple but important areas of this site are fully operational. Let's look at the log file to dig deeper into the fail.

Automated Test Results

You can find Automated test log file in Results folder. The image below is taken from this file.

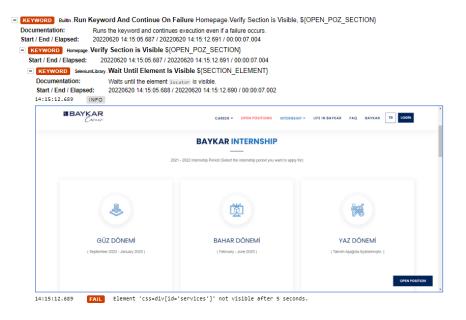
Tests Log

Generated 20220620 14:15:22 UTC+03:00 18 minutes 23 seconds ago

Test Statistics

Total Statistics	\$	Total \$	Pass ♦	Fail \$	Skip \$	Elapsed \$	Pass / Fail / Skip
All Tests		8	7	1	0	00:03:00	
Statistics by Tag	\$	Total \$	Pass \$	Fail \$	Skip \$	Elapsed \$	Pass / Fail / Skip
Common		1	1	0	0	00:00:08	
Footer		1	1	0	0	00:00:25	
Forget Password		1	1	0	0	00:00:10	
I-01		1	0	1	0	00:00:35	
Integration		1	0	1	0	00:00:35	
Life in Baykar Slider		1	1	0	0	00:00:48	
Login		1	1	0	0	00:00:10	
Main Slider		1	1	0	0	00:00:48	
Navbar Career		1	1	0	0	00:00:19	
Navbar Common		1	1	0	0	00:00:22	
Navbar Intern		1	1	0	0	00:00:13	
Open Pos Slider		1	1	0	0	00:00:48	
Sign Up		1	1	0	0	00:00:10	
Smoke		7	7	0	0	00:02:26	
SSS Panels		1	1	0	0	00:00:48	
Statistics by Suite	\$	Total \$	Pass \$	Fail \$	Skip \$	Elapsed \$	Pass / Fail / Skip
Tests		8	7	1	0	00:03:00	
Tests . Kariyer.Baykartech		8	7	1	0	00:03:00	

When we look at the log file, we see that the Integration test I-01 failed. Scroll down for more detail. I-01 is a tag number that makes it easy for me to separate test cases.



Robot clicks Open Positions navbar section in Internship page but "Open Positions" page/section does not appear in 5 seconds. The system fails the cross-page integration tests.

When we look at the screenshot, we confirm that the page is not opened.

We have same problem in the "Life In Baykar" section.

Automated Test Results

Here is the log for all passed tests. I can't fit it into the pdf because the file length is too long, go to the Results folder to browse log file.



Manual tests are carried out by human hands and the records of the tests are kept with an Excel file. We have to manually perform tests that cannot be done with Automation, such as ReCAP validation. I also manually tested the most important of the smoke tests

Step#	Description
1	Visitor must enter site
2	Visitor must navigate navbar
3	Visitor should be able to switch language
4	Visitor switch Turkish language
5	Visitor should be able to click "Yerleşkelerimiz" dropdown
6	Visitor should be able to click "Sunduğumuz Faydalar" dropdown
7	Visitor should be able to click "Sosyal Alanlar" dropdown
8	Visitor should be able to click "İstatistik" dropdown
9	Visitor should be able to click "Açık Pozisyonlar" navbar button
10	Visitor should be able to click "Açık Pozisyonlar" navbar button in homepage
11	Visitor should be able to click "Staj Dönemleri" dropdown
12	Visitor should be able to click "Staj Takvimi" dropdown
13	Visitor should be able to click "Staj SSS" dropdown
14	Visitor should be able to click "Baykar'da Yaşam" navbar button
15	Visitor should be able to click "Baykar'da Yaşam" navbar button in homepage
16	Visitor should be able to click "S.S.S" navbar button
17	Visitor should be able to click "BAYKAR" navbar button
18	Homepage main slider must be show correct image and text
19	Visitor Should be able confirm reCAP, fill and send contact form
20	Check four "SSS" Panels in Homepage
21	Click all footer links and check it shows correct page
22	Homepage "Açık Pozisyonlar" slider must be show correct element
23	Click all "Açık Pozisyonlar" slider elements
24	Click "Tüm Açık Pozisyonlar" button
25	"Baykarda Yaşam" slider should be have clicable image
26	Sign-In button should be open dashboard sign-in page
27	Forget password link should be open forget password page
28	Create account link should be open create account page
29	User should be able login dashboard
File	This is a MANUAL Test File, for more complex tests, see Automated Tests
Info	Last Run 6/20/2022

Expected Result

Show kariyer.baykar homepage

Show dropdown menus

Show English homepage

Show Turkish homepage

Show "Yerleşkelerimiz" page/section

Show "Sunduğumuz Faydalar" page/section

Show "Sosyal Alanlar" page/section

Show "İstatistik" page/section

Show "Açık Pozisyonlar" page/section

Show "Açık Pozisyonlar" page/section

Show "Staj Dönemleri" page/section

Show "Staj Takvimi" page/section

Show "Staj SSS" page/section

Show "Baykar'da Yaşam" page/section

Show "Baykar'da Yaşam" page/section

Show "S.S.S" page/section

Open baykartech.com in new tab

Main slider show correct text and image

Show pop up message for success and send email to user for confirm

Show correct faq text by clicked header

Open expected link by link name

Show correct element

Open correct position by clicked element

Open Application page

Show zoomed image by clicked element

Open Baykar Kariyer login page

Open Baykar Kariyer forget password page

Open Baykar Kariyer create account page

Open Baykar Kariyer Dashboard after login

Test	D	*	

https://kariyer.baykartech.com/tr/

NameSurname=Berkant Yüksektepe,email=byxxxxx@gmail.com, Phone=05436XXXXXX, Message=Bu mesaj Baykar Kariyer sayfası için yapılan manuel testlerde, test case olarak kullanılmak ve manuel sistem testlerini gerçekleştirmek için gönderilmiştir. Mesajı dikkate almayınız.

Email=byxxxxx@gmail.com, Password=xxxxxxxxx

Actual Result	Execution Status
Homepage opens	PASS
shows all dropdowns	PASS
English homepage opens	PASS
Turkish homepage opens	PASS
Kariyer page opens and scrolls "Yerleşkelerimiz" section	PASS
Scrolls "Yerleşkelerimiz" section	PASS
Scrolls "Sosyal Alanlar" section	PASS
Scrolls "İstatistik" section	PASS
Homepage opens and shows top of page	FAIL
Scrolls "Açık Pozisyonlar" section	PASS
Staj page opens and scrolls "Staj Dönemleri" section	PASS
scrolls "Staj Takvimi" section	PASS
scrolls "Staj SSS" section	PASS
Homepage opens and shows top of page	FAIL
Scrolls "Baykar'da Yaşam" section	PASS
Scrolls "S.S.S" section	PASS
Opens baykartech.com in new tab	PASS
shows correct text and image	PASS
Show pop up message for success and send email to user for confirm	PASS
Shows correct faq text by header	PASS
Shows correct page by link name	PASS
Shows Correct element	PASS
All elements shows correct page by element	PASS
Application page opens	PASS
Shows zoomed image and slides	PASS
Opens Baykar Kariyer login page	PASS
Opens Baykar Kariyer forget password page	PASS
Opens Baykar Kariyer forget create account page	PASS
Opens Baykar Kariyer Dashboard page	PASS

Execution Start Page	Tags
Homepage	Smoke
Homepage	Smoke
Homepage	Smoke
Homepage	Smoke
Homepage	Smoke
Career	Smoke
Homepage	Smoke
Homepage	Smoke
Intern	Smoke
Intern	Smoke
Intern	Smoke
Homepage	Intage

Homepage	Smoke
nomenage	SHIUKE

Homepage	Smoke
Homepage	Smoke
Homepage	Smoke
Homepage	Smoke
Homepage	Smoke
Homepage	Smoke
Homepage	Smoke
Sign-In	Smoke
Forget-Password	Smoke
Sign-In	Smoke

QA: General Opinion

For kariyer.baykartech.com, When we look at all the tests carried out, I can say that all the accessible and vital systems of the site are in good working condition.

However, there are problems with integration and language setting. Currently, users may have problems switching from one page of the site to another. Users who want to use a foreign language may encounter texts/articles in different languages.

page load speeds are moderate, they can be made faster with optimizations. Slowest: Career page. Fastest: Sign-In page.

Reduce Image Sizes in Career page. "Keşan Flight Training and Test Center" image size is 8,8MB. "Corlu Flight Training and Test Center" image size is 5,9MB.



Oluşturulan boyut: 547 x 365 px Oluşturulan en boy oranı: 547:365 Yerleşik boyut: 5472 × 3648 px

Yerleşik en boy oranı: 3:2 Dosya boyutu: 8.8 MB

Mevcut kaynak: https://cdnik.baykartech.com/media/upload/ userFormUpload/SGVlkQlzBX4GMY8Ggx1YAj 3moyWjdHDBJPG



Oluşturulan boyut: 547 × 308 px Oluşturulan en boy oranı: 547:308 Yerleşik boyut: 5472 × 3078 px Yerleşik en boy oranı: 16:9

Dosya boyutu: 5.9 MB

Mevcut kaynak: https://cdnik.baykartech.com/media/upload/ userFormUpload/J97DePHe7miagF1QluuMG dhRgKycOOD1JPG

Site design is user friendly, There is no sudden contrast color change in images and vectors. Pictures are carefully selected, vectors are designed in harmony with the brand and its products.

Page loader can be made more compatible with the brand. Like the spinning Bayraktar drone animation etc.

QA: Rating

The Last Step: QA Rating for kariyer.baykartech.com, Page and overall system scoring by Berkant Yüksektepe.

Design:	<u>A</u> +
Color Compatibility:	<u>A</u> +
Cross-Page Integration:	<u>F-</u>
Page Load Speed:	<u>C</u> +
Sign-In Required Pages:	<u>A</u> +
True Language Support:	B+
Animations:	<u>A-</u>
Easy-To-Use:	A +

Overall Score

B+

Easy to use and understand, developed for the purpose. It has some issues that do not affect general use.

Project Files

https://github.com/Berkantyuks/QA-Test-Automation-Baykar