SDET - Internship tasks – Solutions

Marek Tokarz, candidate for Test Automation Engineer (JavaScript) - OpenX.

Repository with code:
https://github.com/marektoja/Zadanie---intern---TESTER-QA-JS.git

1. Test function and create input/output data sets, describe which cases this data set will test:

Function description:
Find the length of the longest substring without repeating characters in the given string `s`.

Table of data sets:

No.	Input	Output			Remarks
-	-	**Final unique substrings:**	**count:**	**length:**	-
1.		No input entered, exiting.			Without input – empty submit.
2.	a	[a]	1	1	
3.	ab	[ab]	1	2	
4.	abc	[abc]	1	3	
5.	abca	[abc, bca]	2	3	
6.	abcabcbb	[abc, bca, cab]	3	3	Example from task.
7.	1234567890	[1234567890]	1	10	All different digits.
8.	1234qwer1234	[1234qwer, 234qwer1, 34qwer12, 4qwer123, qwer1234]	5	8	Digits and letters.
9.	123qweasdzxc456rtyfghvbn	[123qweasdzxc456rtyfghvbn]	1	24	Many digits and letters.
10.	!@#$%^&*()_+[]{};':",.<>/?	[!@#$%^&*()_+[]{};':",.<>/?]	1	26	Signs, characters.
11.	1 6 j 8 ee j 7 5	[1 6, 8 e, j 7, 7 5]	4	3	Using “space” key.
12.	bf2938f239.[..]e[.[5. g?=--,3-40,f,34,f- /[/- 43lv9f340 9fk3f[,34f349 fk3c9m				Checking maximal input, compiler (https://www.programiz.com/javascript/online-compiler/) haven’t printed all of output.

13.	bf2938f239.[..]e[.[5.g?=--,3-40,f,34,f- /[/-43lv9f3409fk3f[,34f349				String shorter than above, result the same.
14.	日本人 中國的 ~=[]()%+{}@;'#!$_&-éè ;∞¥£€	[中國的 ~=[]()%+{}@;'#!$_&-]	1	23	No-ASCII signs, characters.

Above data set can test various cases (user input):

1. Empty input.
2. Only letters input.
3. Only digits.
4. Mix of letters and digits.
5. Different signs and characters.
6. Using “space” key while typing.
7. Too big input.
8. No-ASCII signs, characters

There might be some variations of above test cases, but mostly they will be connected with those mentioned above.

Example of part of program output:

```
Ignored next letter €, because ¥£€ already contains it
- Word too short - ignoring
Found word with unique letters: £€ (length: 2)
Ignored next letter €, because £€ already contains it
- Word too short - ignoring
Found word with unique letters: € (length: 1)
Ignored next letter €, because € already contains it
- Word too short - ignoring
!!! Final unique substrings: [中國的 ~=[]()%+{}@;'#!$_&-], count: 1, length: 23
Program finished
```

2. **UI testing** (JS/TS)

Create test-cases for successful and unsuccessful login, and any additional test-cases you might think it would be good to add.

http://uitestingplayground.com/sampleapp

Test scenario	**Test Case**	**Test Data**	**Expected Result**	**Actual result**
Login functionality	#1: Empty username and empty password.	Username: Password:	Invalid username/ password	Invalid username/ password
	Empty username and valid password	Username: Password: pwd	Invalid username/ password	Invalid username/ Password

Test scenario	Test Case	Test Data	Expected Result	Actual result
	#2: Valid username and unvalid password.	Username: 1 Password:	Invalid username/ password	Invalid username/passw ord
	#3: Valid username and valid password.	Username: 1 Password: pwd	Welcome, 1!	Welcome, 1!
	#4: Reloading page in browser	Username: 1 Password: pwd	User still logged in.	User logged out.
	#5: Typing to omany characters in „login box”	Username: 1111111111111111 1111111111111111 11111111 Password: pwd	Response: too many characters typed in.	Welcome, 1111111111111 111111 1111111111111 111111!
	#6: Checking if password is masked	Username: 1 Password: 11111111	Password is masked	Password was masked
	#7: Checking if password can be copied	Username: 1 Password: 11111111	Password should not be allowed to be copied.	I could copy password.
	#8: Checking if user is still logged in after cliking „forward” and „backward” in browser	Username: 1 Password: pwd	Welcome, 1!	User logged in or other response of being logged.
	#9: Clicking: „Log out”	Username: 1 Password: pwd	User logged out.	User logged out.
	#9: Typing No-ASCI signs, characters	Username: 日本人 中國的 ~=[]()%+{}@;’#!$_&- éè ;∞¥£€ Password: 1	Invalid username/ password	Invalid username/ password
	#10: Typing No-ASCI signs, characters	Username: 日本人 中國的 ~=[]()%+{}@;’#!$_&- éè ;∞¥£€ Password: pwd	In my opinion No-ASCII signs, characters should not be allowed.	Welcome, 日本人 中國的 ~=[]()%+{}@;’#!$ _&- éè ;∞¥£€!