Testing the Etherscan Registration form

A.Create TEST SCENARIOS for the registration form on Etherscan website (https://etherscan.io/register)

Scenario ID:	Test Scenario	No of Test cases
TS01	Verify that system generates a validation messages when clicking on submit button without filling all the mandatory fields	1
TS02	Verify that clicking on submit button by leaving optional fields, submits the data to the server without any validation error	1
TS03	Verify that clicking on submit button by filling all mandatory and optional fields, submits the data to the server without any validation error	1
TS04	Verify that the validation of email field by entering incorrect email id	1
TS05	Verify that by entering the username for less value than minimum,system generates an error message.	1
TS06	Verify whether the password and confirm password are same or not	1
TS07	Verify the username field, by entering username which already in use	1

B. Explain what type of tools you would use to enable an automatic testing system for the task above and how they would be utilized.

I used Robot Framework with Selenium and Python. Also I used PyCharm as an IDE. Selenium offers a user-friendly interface that helps create and execute tests easily and effectively.

I wrote seven test cases. Test cases using the Robot framework are created using Keywords. Before using the Keywords, I imported SeleniumLibrary in the Robot script (in the *** Settings *** section), this is done using Library SeleniumLibrary.

The results are stored in the results directory. Right click on report.html file then open in Browser - Chrome and it will show the results of the execution. That's mean that I don't have to generate any sort of report or import any external reporting library. So, with robotframework and selenium library it automatically generates the screenshots and reports.

About Captcha

Through Captcha, the user is asked to perform a certain task, such as click on the images from a set of different images that match the required criteria. While automating Captcha is not the best practice, there are three efficient ways of handling Captcha in Selenium: by disabling the Captcha in the testing environment , adding a hook to click the Captcha checkbox, by adding a delay to the Webdriver and manually solve Captcha while testing. I used the last one with adding a delay 15s.