

Assignment 3

* Title: Perform validations using Javascript/JQuery.

* Problem Statement:

Perform validations using Javascript/JQuery on the application of virtual lab and online assessment.

* Objective:

To understand in depth working of Javascript/~~and~~ JQuery and use them to provide validations to the web application.

* S/w and H/w requirements:

- i) Apache Tomcat Server (8.5.24)
- ii) Linux OS (64 bit)
- iii) Keyboard, Mouse, Processor, Monitor
- iv) Web browser (chrome)
- v) Text Editor (VSCode)

* Theory:

* Verification:

It includes checking documents, design codes and programs. It is a static testing.

It confirms whether or not a certain user is who, what he/she claims to be.

* Validation:

It includes testing and validating the actual data.

It checks for any errors/bugs which

may occur due to false or wrong data being entered by the user.

It is generally done before verification.

eg. If the user enters his name in the field of phone number.

It includes common checks like email, passwords, phone number, name validations, etc.

* JavaScript

① It is an interpreted lang. written in C and a combination of ECMA Script and DOM.

② It is verbose.

③ An individual has to write long lines of code.

④ As it is a language, it is heavier than JQuery.

⑤ It can exist on its own.

JQuery

① It is a light weight JavaScript Library that only has the DOM.

② It is more concise.

③ An individual has to write fewer lines of code.

④ As it is a library, it is light weight.

⑤ It is dependent on JavaScript.

* Internal Javascript

① Including JavaScript code in `<script>... </script>` in an HTML file.

② Less readable code.

③ Maintenance is poor as all code is in one file.

④ Poor performance.

External Javascript

① Having a separate .js file with JS in it.

② Easily readable code.

③ Maintenance is enhanced as code is split into multiple modules.

④ Better performance.

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Java

- ① Java is a strongly typed language.
- ② It is an OOP lang.
- ③ It requires more memory.
- ④ It uses a thread based approach to resolve concurrency.
- ⑤ It is mainly used for developing enterprise appl'ns.

JavaScript

- ① It is a weakly typed language and has a more relaxed syntax.
- ② It is an object based scripting language.
- ③ It requires less memory.
- ④ It uses event based approach to concurrency.
- ⑤ It is mainly used for developing web appl'ns.

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In this assignment, I have performed validations on the ^{ter}Reg~~login~~ Page and Update Profile page. I have used regular expressions for the same.

I have applied validations to ^{registration}~~login~~ form fields like Name, Email, password and contact no.

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Conclusion:

From this assignment, I was able to understand the basics of JavaScript, difference between Internal and External JS and hence implement the validations on the registration and update profile page.