



# FORM VALIDATION

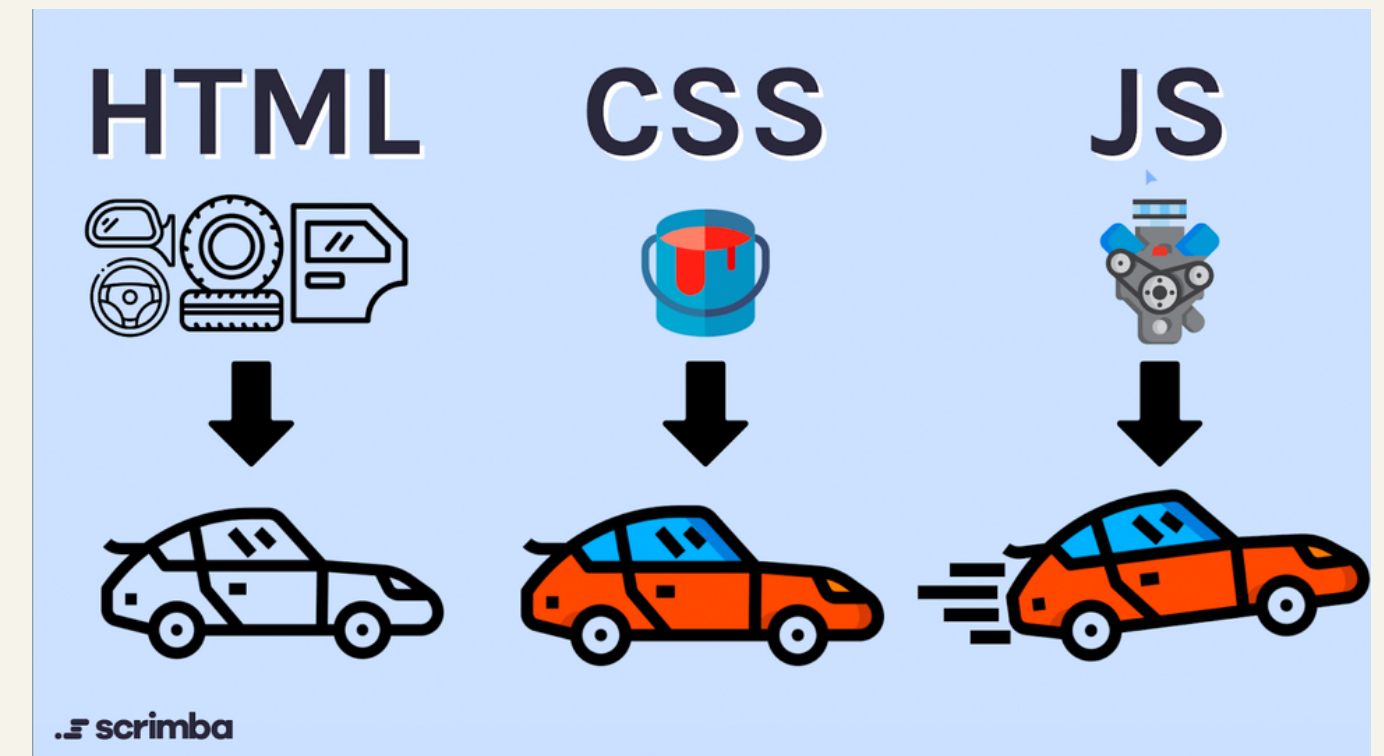
USING HTML, CSS AND JAVASCRIPT

**UDHAYAN V S**

**99220041056**

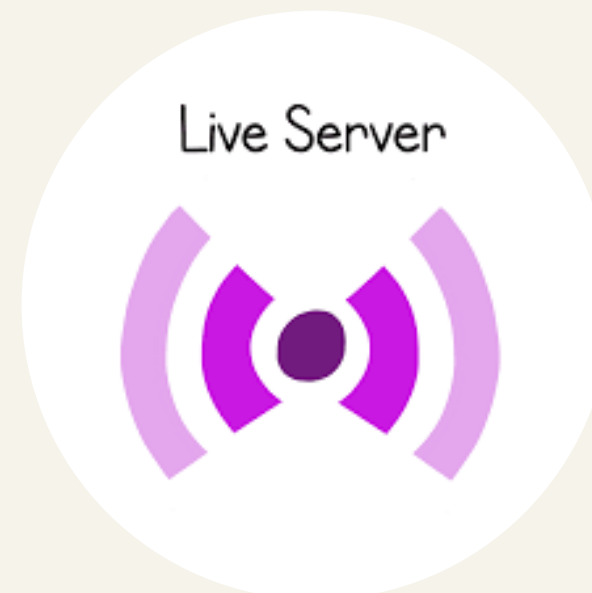
# INTRODUCTION

Form validation is a crucial aspect of web development to ensure that user-submitted data meets specified criteria before it is sent to the server for further processing. In this project, we implement form validation using HTML, CSS, and JavaScript to enhance user experience and data integrity.



# ABOUT SOFTWARE TOOL

- Text Editor :Visual Studio Code (VS Code) - A popular and lightweight code editor with excellent support for HTML, CSS, and JavaScript
- Extensions for VS Code:
  1. Live Server – to host the local server website



# USAGE OF TOOLS

● Visual Studio Code (VS Code) is an excellent choice for HTML, CSS, and JavaScript development. Its interface and features streamline coding tasks, with syntax highlighting and auto-completion enhancing productivity.

● Extensions like Live Server provide real-time preview of HTML and CSS changes, while debugging tools ensure smooth JavaScript development.



# Reported literature

HTML, CSS, and Javascript for Web Developers  
BY



Instructor: Yaakov Chaikin

# OBJECTIVE OF PROJECT

- The objective of form validation using HTML, CSS, and JavaScript is to ensure that the data submitted by users through a web form meets certain criteria or constraints before it is sent to the server for further processing.
- Form validation helps to improve the user experience by providing immediate feedback to users if they have entered data incorrectly or incompletely, reducing the likelihood of errors and improving the accuracy of the submitted data.

**Register With Us**

Username

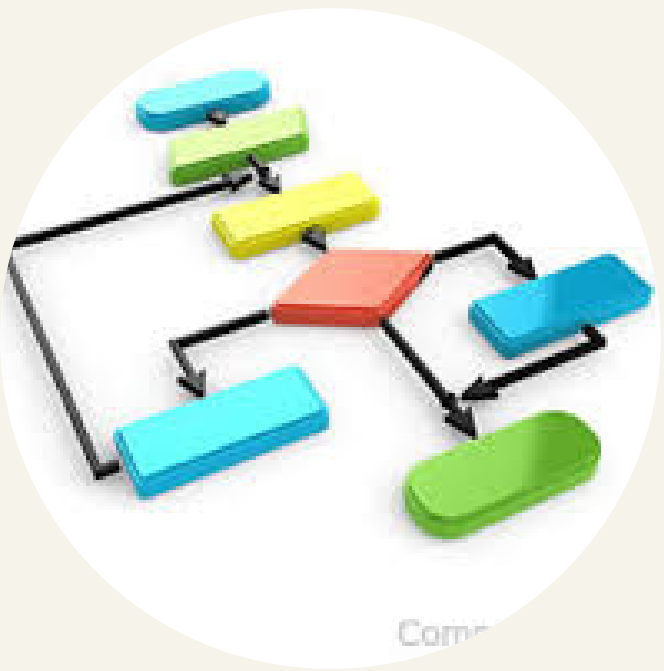
Email  

! Please include an '@' in the email address. "target" is missing an '@'.

Confirm Password

Passwords do not match

# USED ALGORITHM



- Get an input from the user.
- Validate the given details in the form, For example, username, email, password, etc.
- If the entered details are correct proceed to the next step.
- Otherwise, it will display the error message.

## WORK DONE IN STEP BY STEP

- The HTML structure contains a form with username, email and password input fields. Each input field has an associated error span element for displaying validation messages.
- CSS styling is applied to the error messages to make them visually distinct.



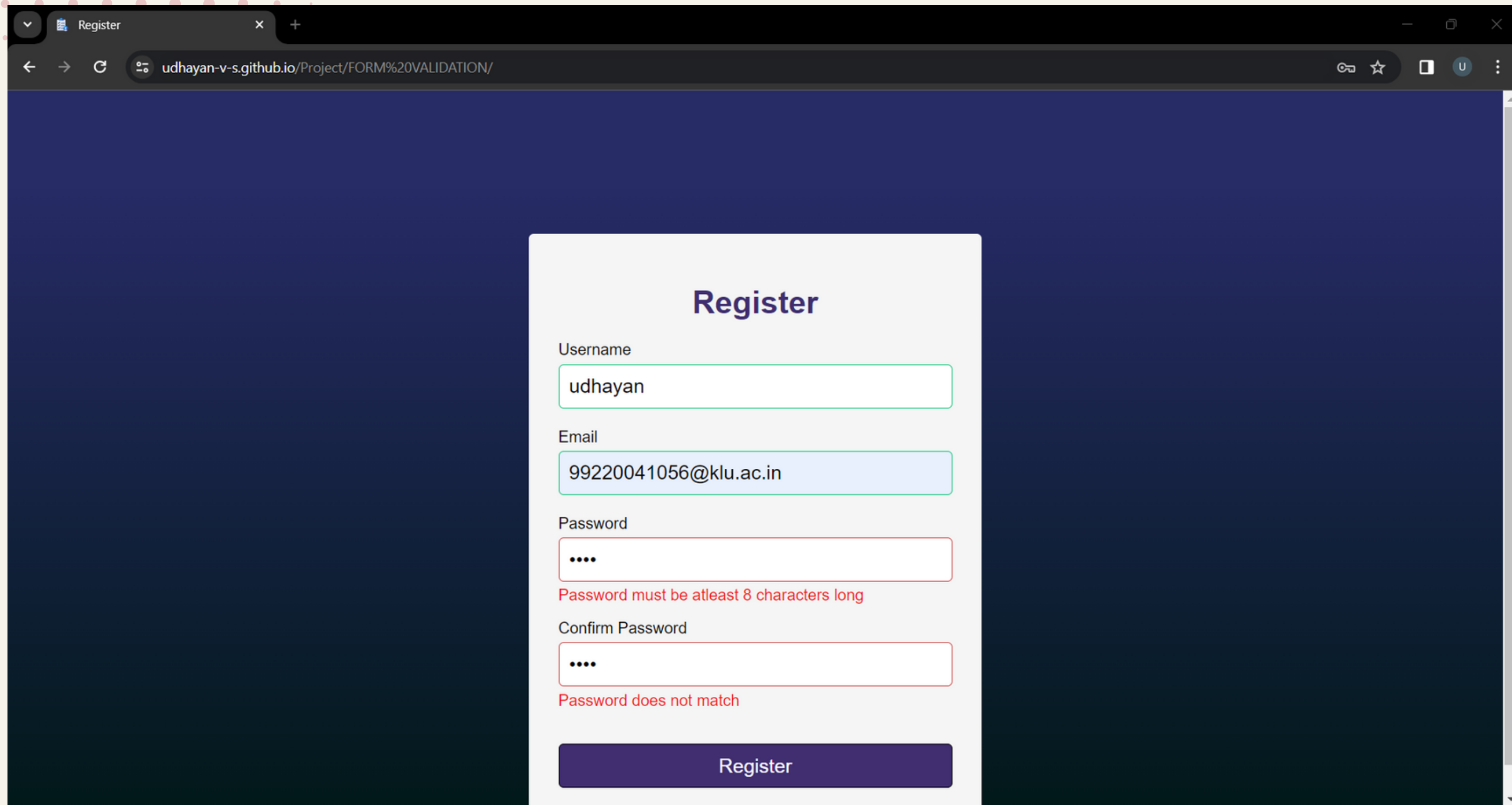


## work done in step by step

- JavaScript handles form submission and validation:
  - Event listeners are attached to the form's submit event.
  - When the form is submitted, the validation logic checks if the email and password inputs meet the specified criteria.
  - Error messages are displayed if inputs are invalid, and form submission is prevented.
  - A helper function (isValidEmail) checks the validity of the email format using a regular expression.
- Testing - Open the HTML file in a web browser.
- Try submitting the form with valid and invalid inputs to observe the validation behavior.



# RESULT



The screenshot shows a web browser window with a single tab titled "Register". The address bar displays the URL "udhayan-v-s.github.io/Project/FORM%20VALIDATION/". The page has a dark blue background. In the center, there is a white registration form titled "Register". The form contains four input fields: "Username" with the value "udhayan", "Email" with the value "99220041056@klu.ac.in", "Password" with four dots, and "Confirm Password" with four dots. Below the "Password" field, there is a red error message: "Password must be atleast 8 characters long". Below the "Confirm Password" field, there is a red error message: "Password does not match". At the bottom of the form is a purple "Register" button.

Register

Username

udhayan

Email

99220041056@klu.ac.in

Password

....

Password must be atleast 8 characters long

Confirm Password

....

Password does not match

Register

# SUMMARY

Form validation using HTML, CSS, and JavaScript is a process of ensuring that user input in web forms meets certain criteria before being submitted to the server. Here's a concise summary of the process:

1. **HTML Structure:** Create an HTML form with input fields and associated error message elements.
2. **CSS Styling:** Style error messages to make them visually distinct from other content on the page.
3. **JavaScript Validation Logic:**
  - Attach event listeners to the form submission event.
  - Write validation functions to check user input against specified criteria.
  - Display error messages dynamically if validation fails.
  - Prevent form submission if validation checks fail.
4. **Testing:** Test the form with various inputs to ensure validation behaves as expected.

# REFERENCES

- <https://www.coursera.org/learn/html-css-javascript-for-web-developers/home/week/1>
- <https://github.com/Udhayan-V-S/Udhayan-V-S.github.io/tree/main/Project/FORM%20VALIDATION>

The background features three vertical stripes on the left: a wide pink stripe, a narrower blue stripe, and a medium-width beige stripe. The right side of the image is a light beige background with two rectangular areas of a pink dot pattern. The top area is a 10x10 grid of dots, and the bottom area is a 10x10 grid of dots, both with a slight fade effect.

THANK YOU