

1. Introduction

What is user interface (UI) design?

A user interface is the point of interaction between humans and computers. User interface design is the process of designing how these interfaces look and behave.

Imagine you're using an app on your smart phone to book flights. The screens you navigate, the buttons you tap and the forms you fill out are all part of the user interface.

A user interface is made up of the following elements:

- **Input controls:** These are interactive elements that enable a user to enter information. Input controls include things like checkboxes, buttons, text fields and dropdown lists.
- **Navigational elements:** These help the user to navigate an interface in order to complete their desired task. Navigational components include things like search fields, sliders and hamburger menus.
- **Informational components:** These communicate useful information to the user, for example through message boxes, notifications and progress bars.
- **Containers:** Containers are used to group content into meaningful sections. A container holds various elements, keeping them to a reasonable maximum width based on the user's screen size. An example of a container in UI design is the accordion menu—a vertically stacked list of headers that can be clicked to hide or show content.

UI design considers all of these elements and how they work together to create interfaces that are both easy to navigate and visually pleasing. As such, UI design covers:

- **Interactivity**—how the user interface and its various elements behave and function. For example, what happens when a user clicks on a particular button.

2. Technologies use for front-end development

1. HTML
2. CSS
3. BootStrap
4. JavaScript
5. React
6. React Native
7. Angular
8. Flutter
9. NPM
10. Vue.js
11. Ionic

1. HTML

Hyper Text Markup Language (HTML), alongside JavaScript and CSS, is a foundational web technology.

Its basic purpose is to structure text which occurs by formatting documents for display on a web page.

HTML5, released in 2014, empowered HTML to natively include multimedia elements as well, such as video and audio. More or less, this development eliminated the need for Adobe Flash Player and similar plug-ins.

Every web page has HTML embedded into it as this markup is necessary for instructing a web browser how to display text, images, and other content onto a webpage.

2. CSS

Cascading Style Sheets (CSS) denotes the styling and presentation of a document. For instance, any HTML document counts on CSS to manage the visual details of the web page.

Layouts, colors, and fonts are all under the jurisdiction of CSS. And CSS3 — the latest edition of CSS as of 2001 — modularized CSS specifications, giving developers more flexibility overall.

3. JavaScript

JavaScript has been around for the past quarter of a century. The programming language is well-known for revolutionizing the web due to its dynamic capabilities.

Dynamic describes content that is susceptible to change, whereas static content is immovable.

Before the emergence of JavaScript, the web as a whole was static in nature. A web page was simply a block of text.

Then JavaScript came about, enabling interactivity, like scrolling, clicking, and much much more.

Now, JavaScript is used on the majority of websites and is the base for most front-end frameworks, many of which will be briefly outlined today.

4. Bootstrap

Bootstrap is a CSS framework with design templates for typography, forms, buttons, navigation, and similar interface modules.

You can think of Bootstrap as a toolkit for building the front-end of responsive sites with ease and speed. Themes and icons come equipped with Bootstrap's pre-built components.

3. About Website

I have created an E- Learning website using HTML, CSS, Java Script and Bootstrap where students can learn various technical courses like Digital Marketing, Graphic Design and Programming Languages etc by registering for the course. After registration they can access the courses by login into their accounts. I have created a registration form and login page.

I have used implemented some frontend technologies to build this website.

Through this documentation I will be explaining the website view as well as html, css and Java Script implementation for it.

4. Implementation

Structure of HTML document

1. A line containing HTML version information,
2. A declarative header section (delimited by the HEAD element),
3. A body, which contains the document's actual content. The body is implemented by the BODY element.

Here's an example of a simple HTML document:

```
<html>
  <head>
    <title>My first HTML document</title>
  </head>
  <body>
  </body>
</html>
```

This is the first part of my website which I have created using heading tag



```
<div style="background:#023047; ">
  <h3 style="color: white; text-align: center;">
    
    Build Your Resume To Get Connected for Jobs and
  Internships</h3>
</div>
```

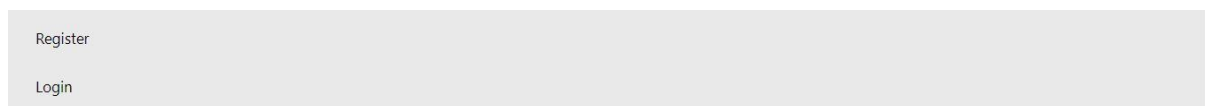
Navigation Bar

This is navigation bar of my website which consists of different different section like Home, About, Contact Us, Register & Login. By clicking on any section you will be redirect or navigate on another page. If you click on Courses then the dropdown list will open and its shows us the different courses available in the list.




Registration Form

After that there is a Register and Login section. By clicking on the Register one registration form will open through which user can register for the courses.



The form consists of set of validations. And there are different different sections are available in the form like First Name, Last Name, Address, Mobile Number, Pin code, Courses, Gender and Date of Birth. Using Java Script the validations are given to the form which means if user miss to fill any section of form or if he enter wrong credentials So, it will display an alert message on the Screen.



STUDENT REGISTRATION FORM

First name Last name

Address

Phone Number


Gender: ☐ Female ☐ Male

Date of Birth

Pincode

Course

Suppose user forget to fill First name in the form



STUDENT REGISTRATION FORM

First name Last name

Address

Phone Number

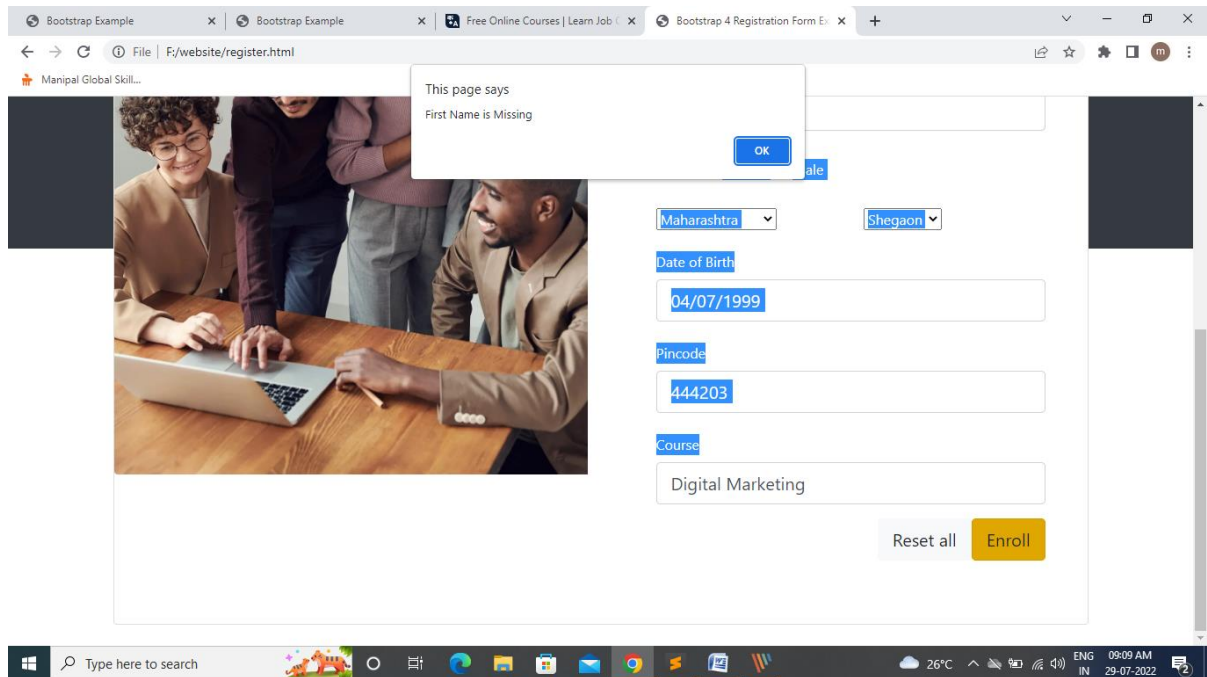
Genders: ☐ Female ☒ Male

Date of Birth

Pincode

So it will display the alert message on the screen.

“First Name is Missing”



Likewise for other fields also, if user missed to fill the Last Name:-

STUDENT REGISTRATION FORM

First name: Milind

Last name:

Address: Shegaon

Phone Number: 9921556994

Gender: ☐ Female ☒ Male

State: Maharashtra

City: Shegaon

Date of Birth: 04/07/1999

So it will display the alert message Last Name is Missing.

This page says
Last Name is Missing

OK

State: Maharashtra

City: Shegaon

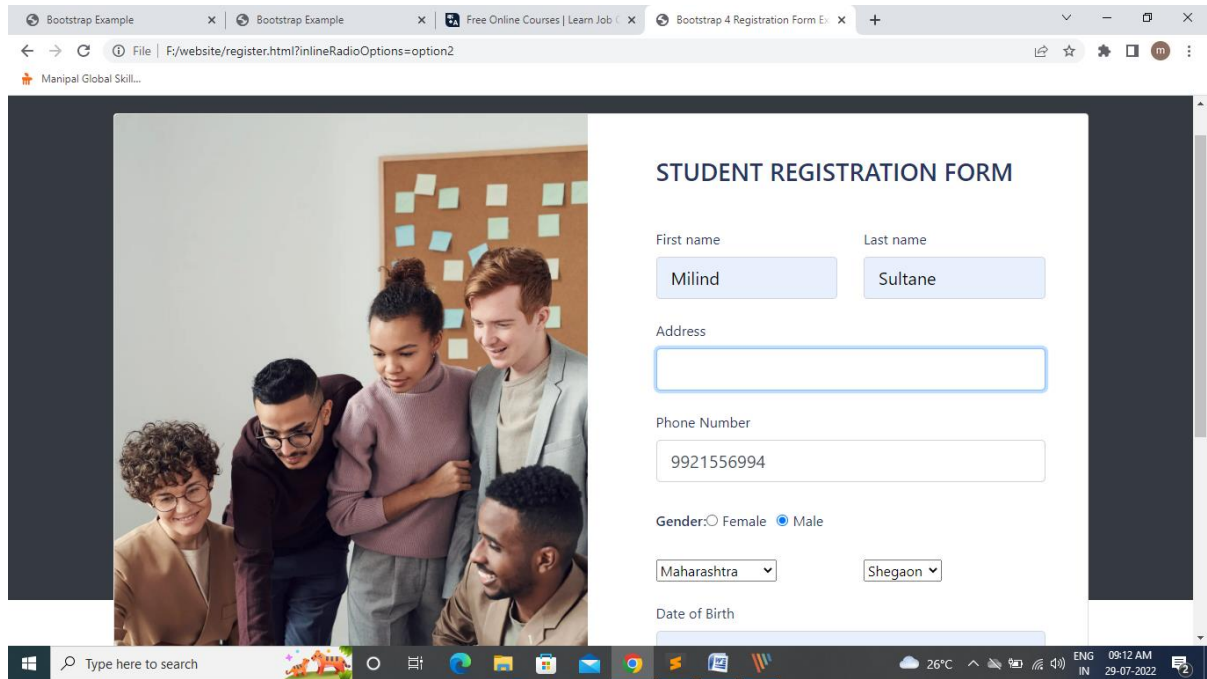
Date of Birth: 04/07/1999

Pincode: 444203

Course: Digital Marketing

Reset all Enroll

If users missed to fill the Address:-



STUDENT REGISTRATION FORM

First name: Milind, Last name: Sultane

Address: [Empty]

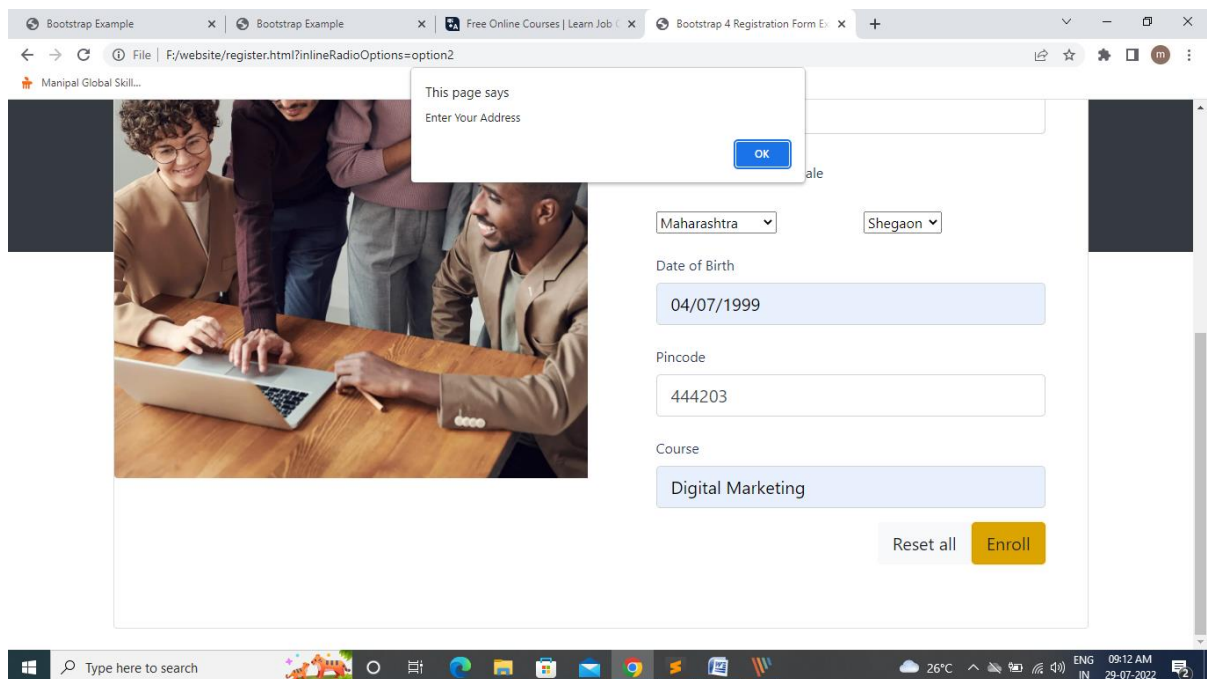
Phone Number: 9921556994

Gender: ☐ Female ☒ Male

State: Maharashtra, District: Shegaon

Date of Birth: [Empty]

So it will display the alert message “Enter your Address”



This page says
Enter Your Address

OK

State: Maharashtra, District: Shegaon

Date of Birth: 04/07/1999


Pincode: 444203

Course: Digital Marketing

Reset all, Enroll

If everything is filled, so it will submit the form and display a sweet alert on the screen.

“Good Job
You have successfully Enrolled for the Course.”



STUDENT REGISTRATION FORM

First name Last name

Address

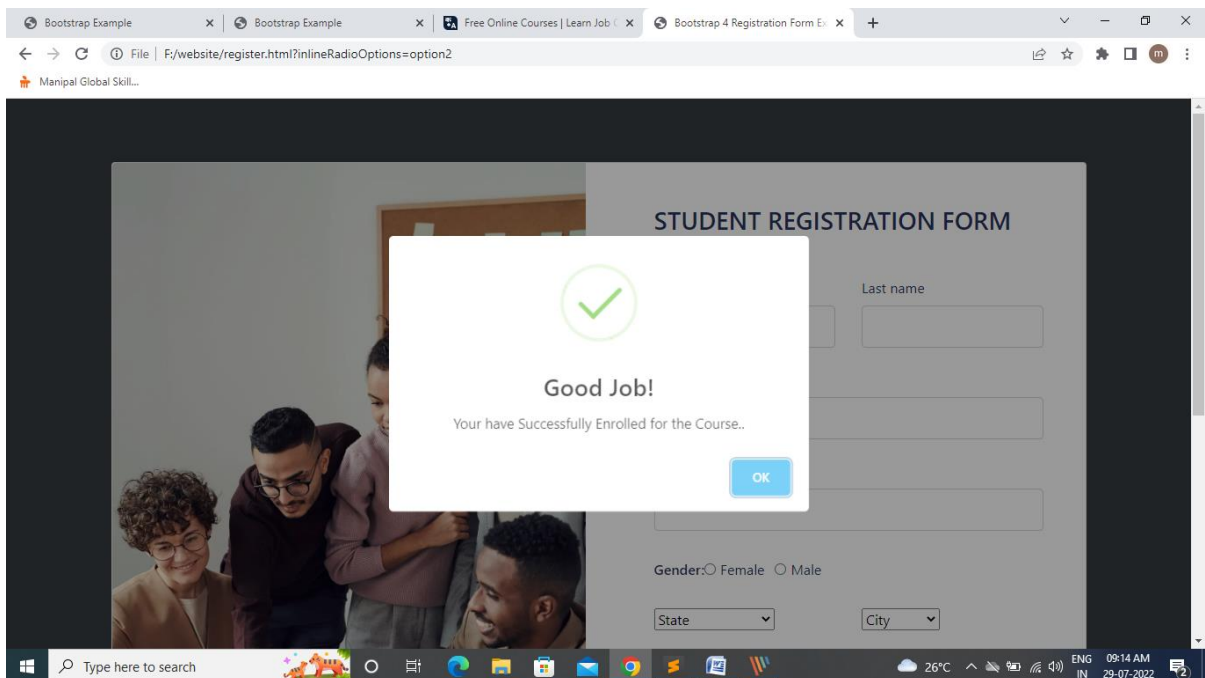
Phone Number

Gender: ☐ Female ☒ Male

Date of Birth

Pincode

Course

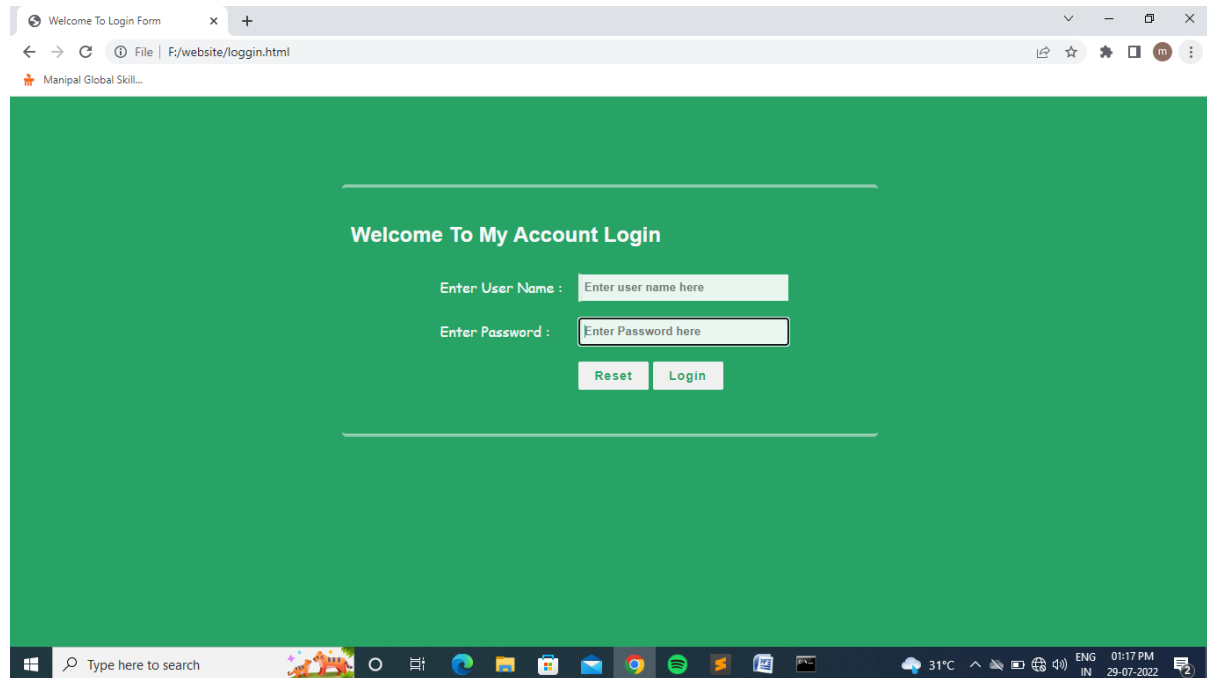


Login

[Register](#)

[Login](#)

When the user click on the Login Button, then the below login page will open



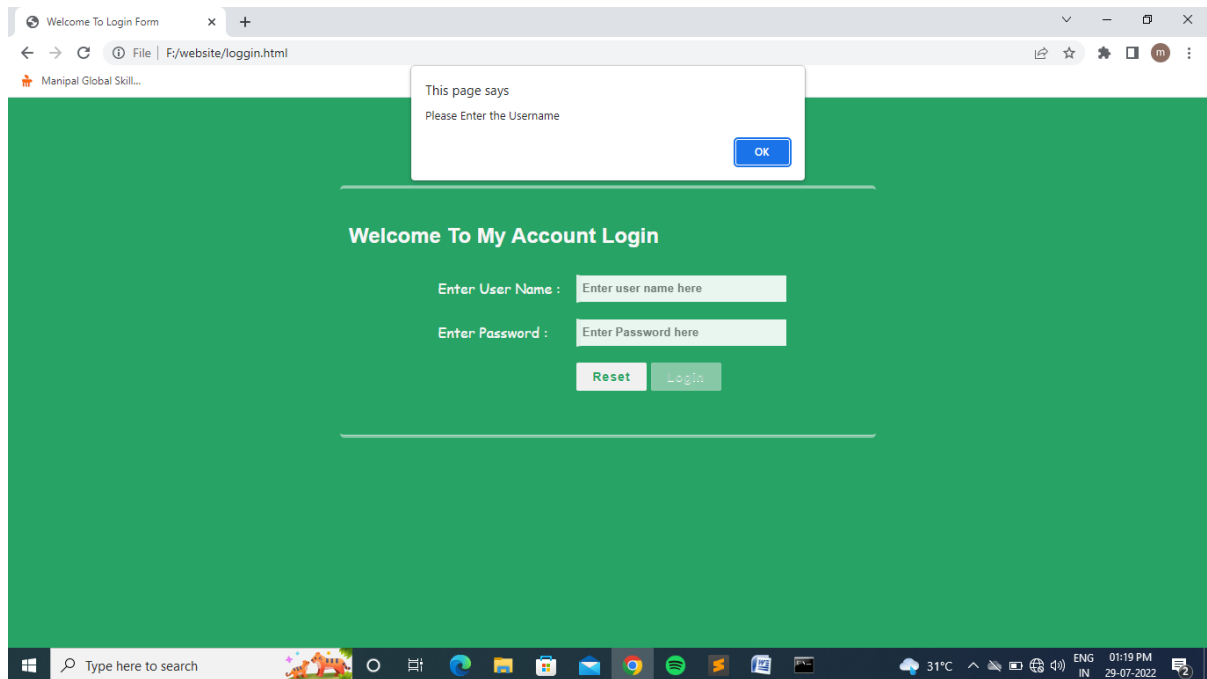
Welcome To My Account Login

Enter User Name :

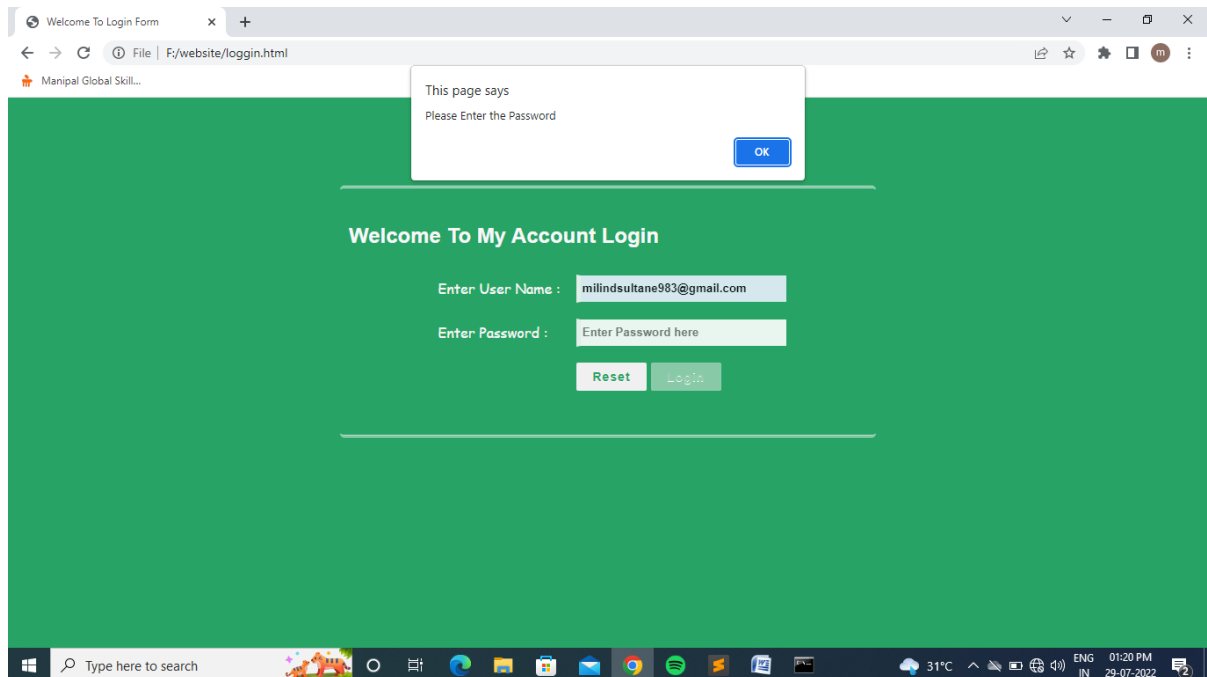
Enter Password :

Here also I have given some set of validations using Java Script for username and password.

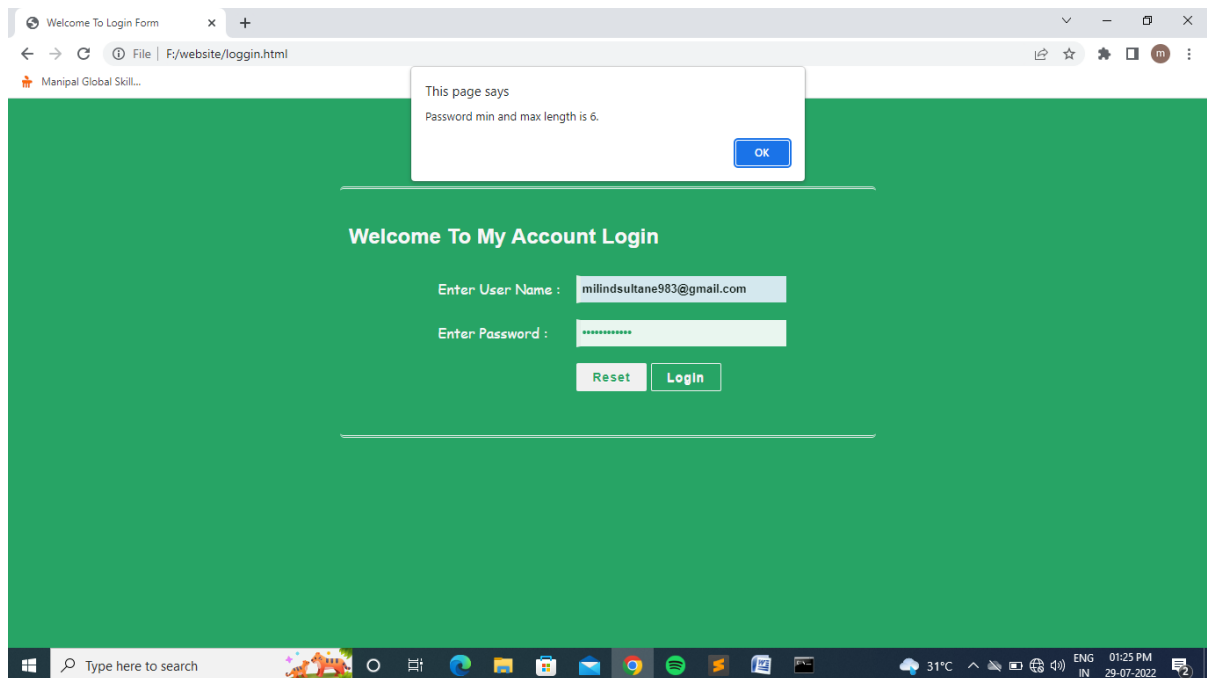
If the username is missing it will display the alert “Please Enter the Username”



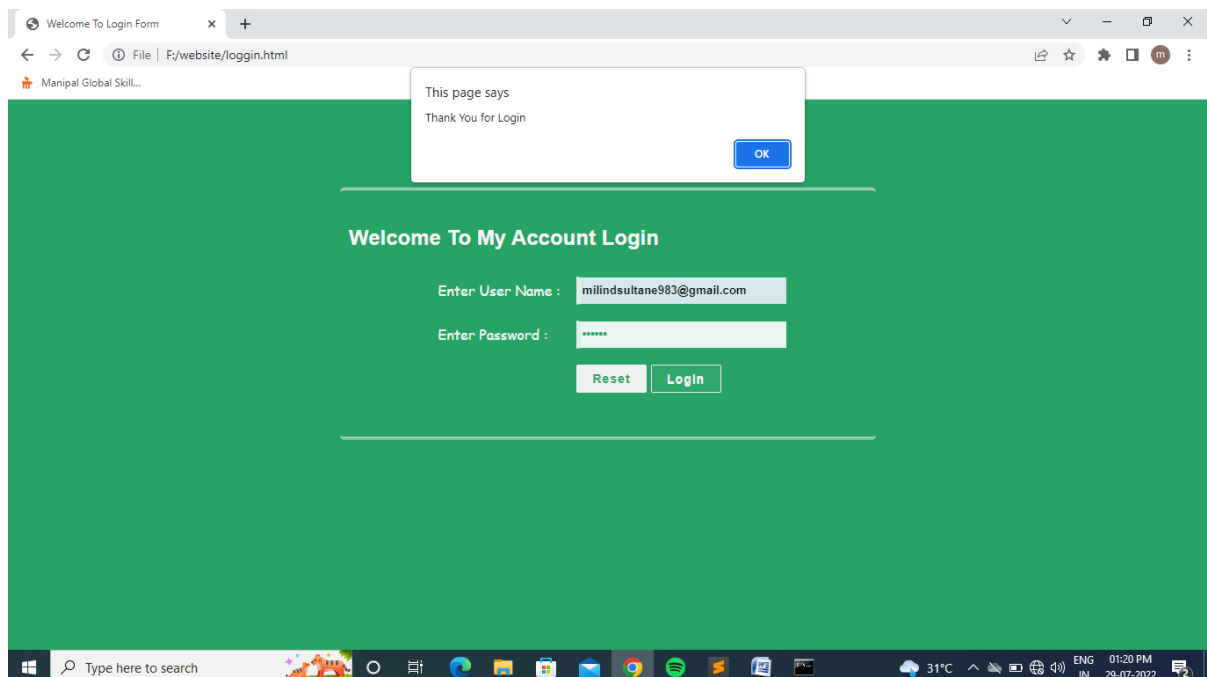
Same thing for password also it will display “Please Enter the Password”



If the user enter the password less than or more than six digit or alphabet so it will not going to accept. It will display the alert message like “Password min and max length is 6”

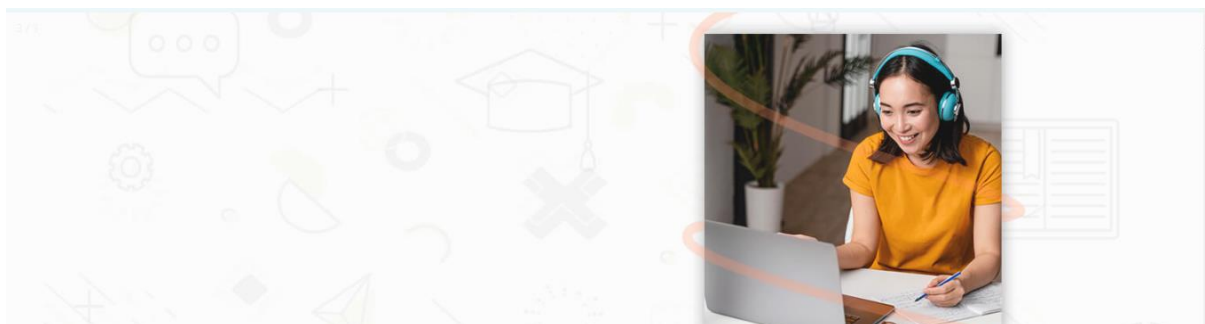
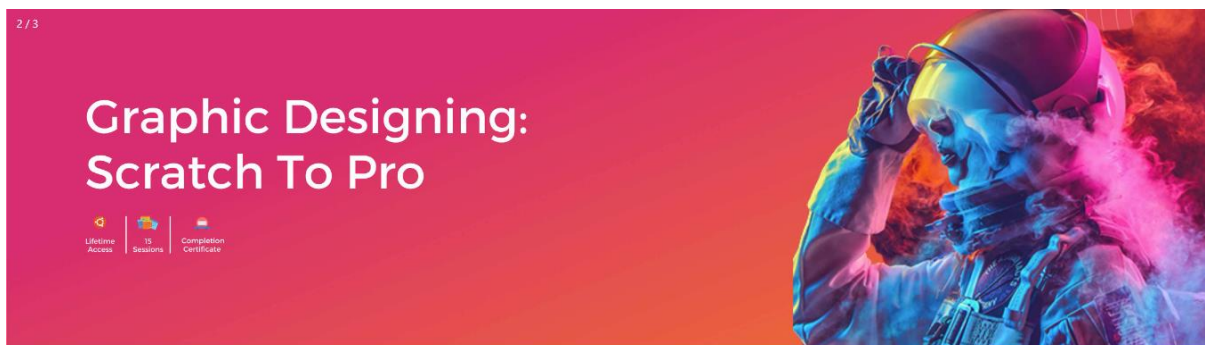
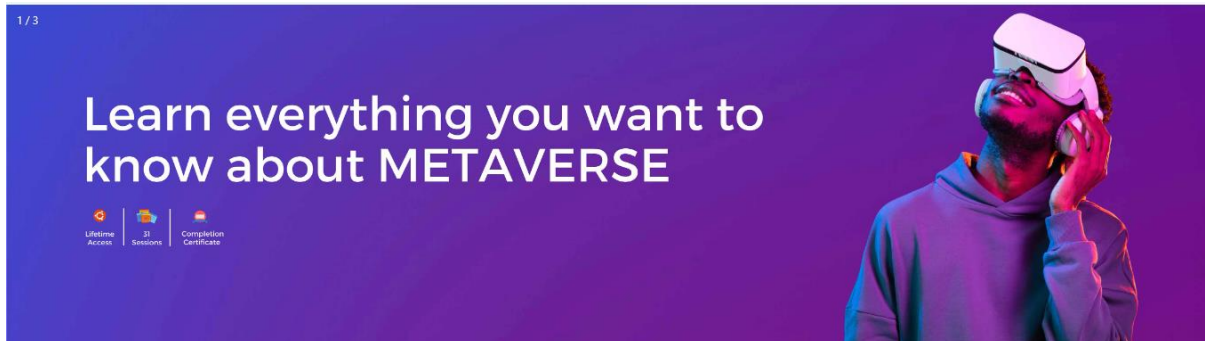


If everything is correct, it will display “Thank you for Login”



Sliding Images

I have added some sliding images homepage of my website. It's makes our website more attractive as well as informative too.



Background Image

This is the background image I have added in my Homepage.

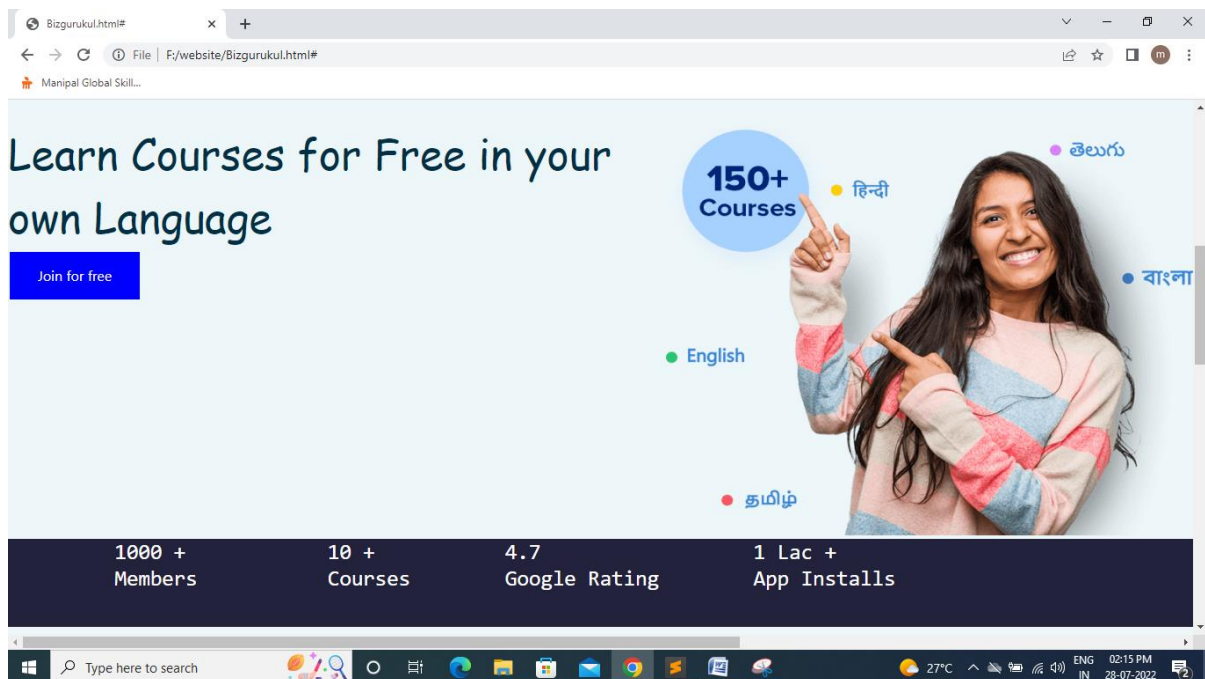


This part shows some information about website. And also there is one button from where user can join our courses. The `<button>` tag is used to create a clickable button within HTML form on your webpage. You can put content like text or image within the `<button>.....</button>` tag.

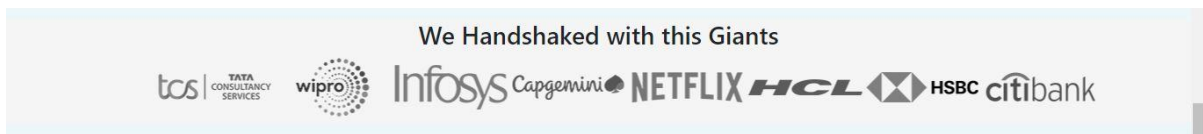
You should always specify the type attribute for a `<button>` tag. Different browsers use different default type for the button element.

HTML Button tag can be used inside and outside the form.

If you use it inside the form, it works as the submit button. You can also use it as reset button.

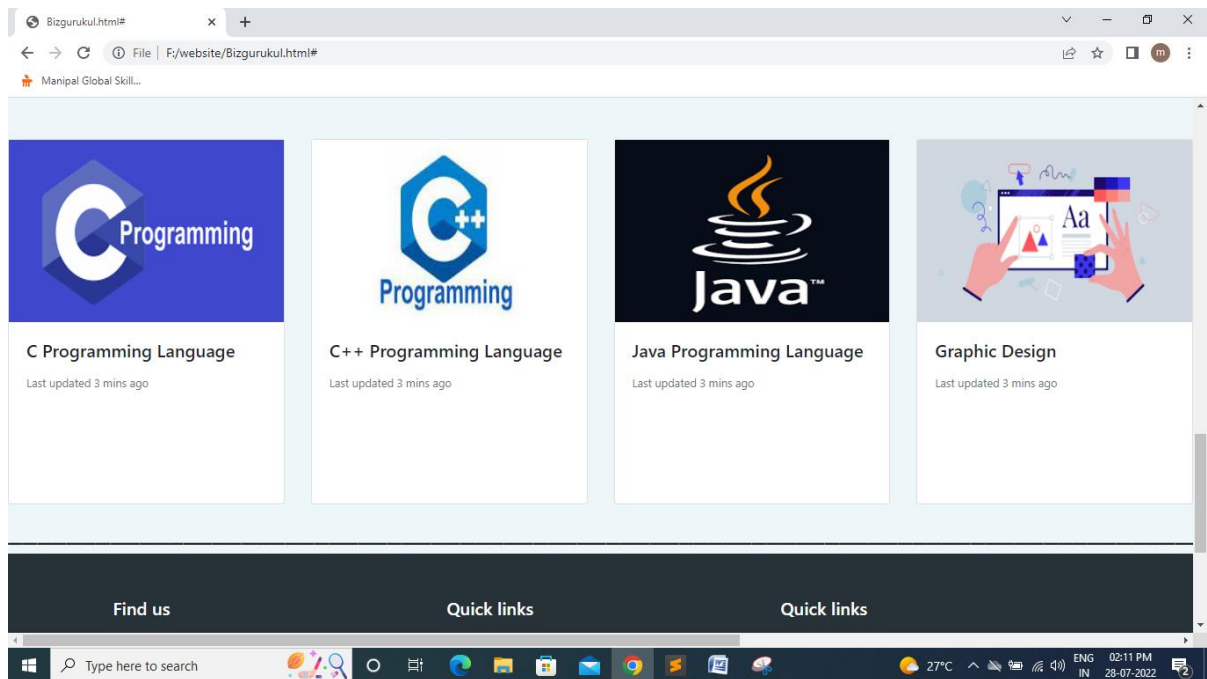


This part of my website shows the user with whom we are collaborated. I have shown this part using continuously scrolling images from right to left. This is possible by using marquee tag. An HTML marquee is a scrolling piece of text displayed either horizontally across or vertically down your webpage depending on the settings. This is created by using HTML `<marquees>` tag.



Cards

There are some cards through which also user can know about the courses available. Cards are used to contain organized information of a single subject like a photo, link, and text. Cards are mainly used along with List View to contain and organize your information.



Footer

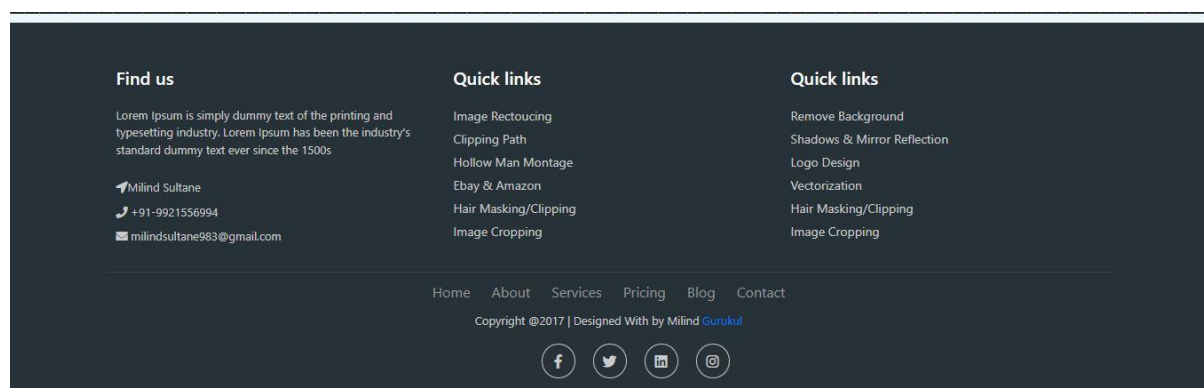
The last section of my website is footer. This is created using footer tag. HTML <footer> tag is used to define a footer for a document or a section. It is generally used in the last of the section (bottom of the page).

HTML <footer> tag contains information about its containing elements for example:

- Author information
- Contact information
- Copyright information
- Sitemap
- Back to top links
- Related documents etc.

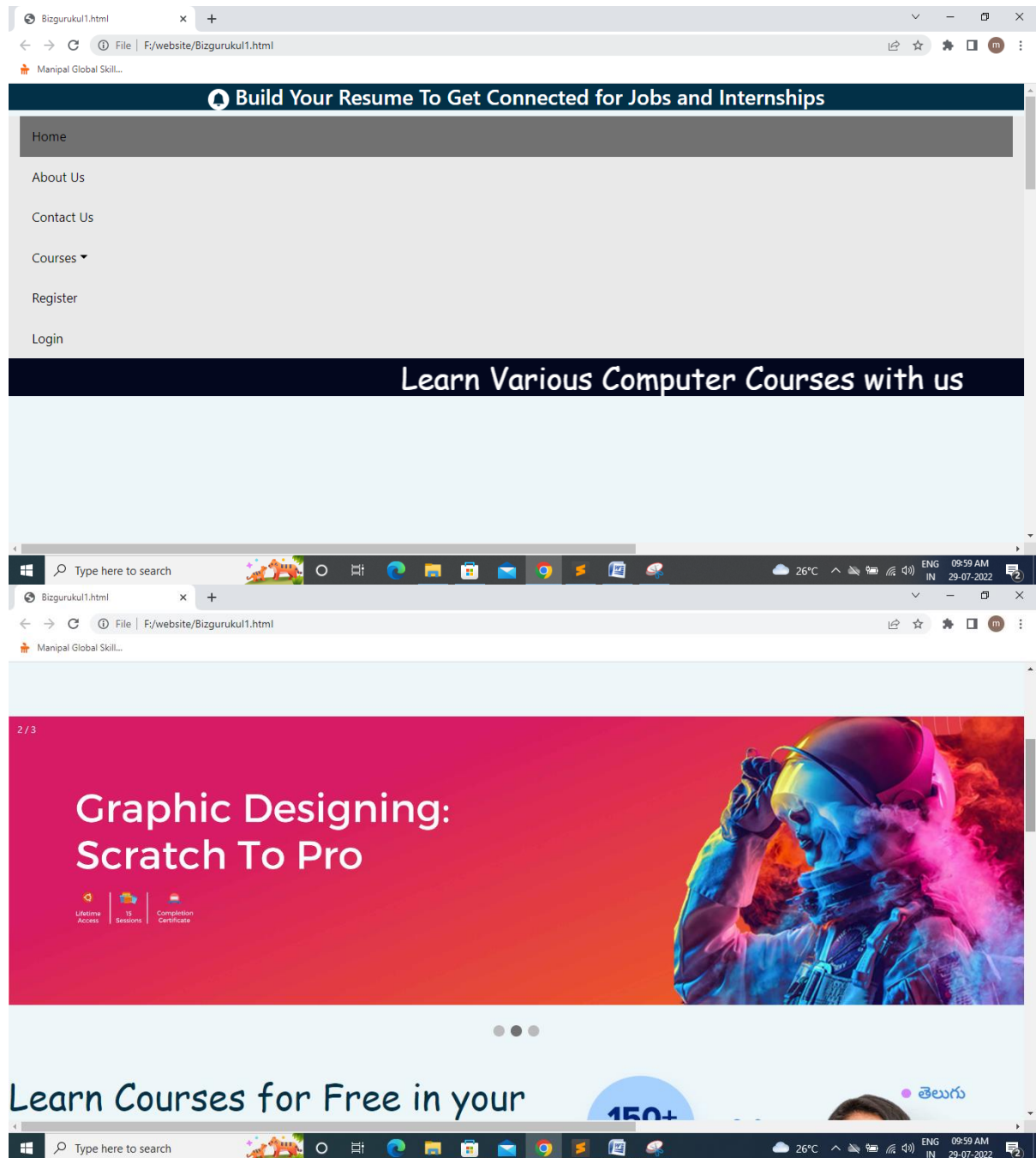
If you want to put information like address, e-mail etc. about the author on your web page, all the relevant elements should be included into the footer element.

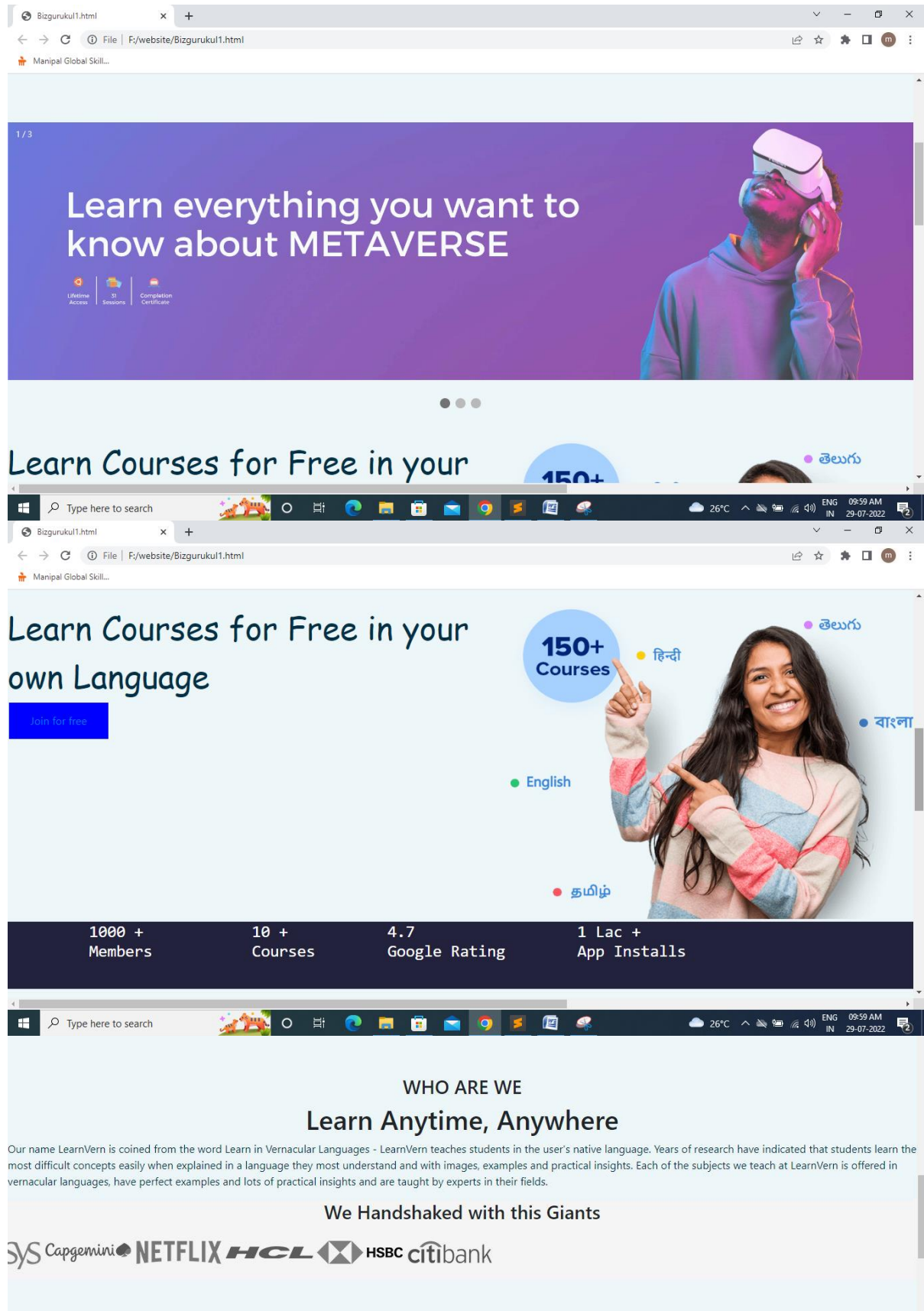
I have added my social media link too, from where you can connect with me on my social media accounts.

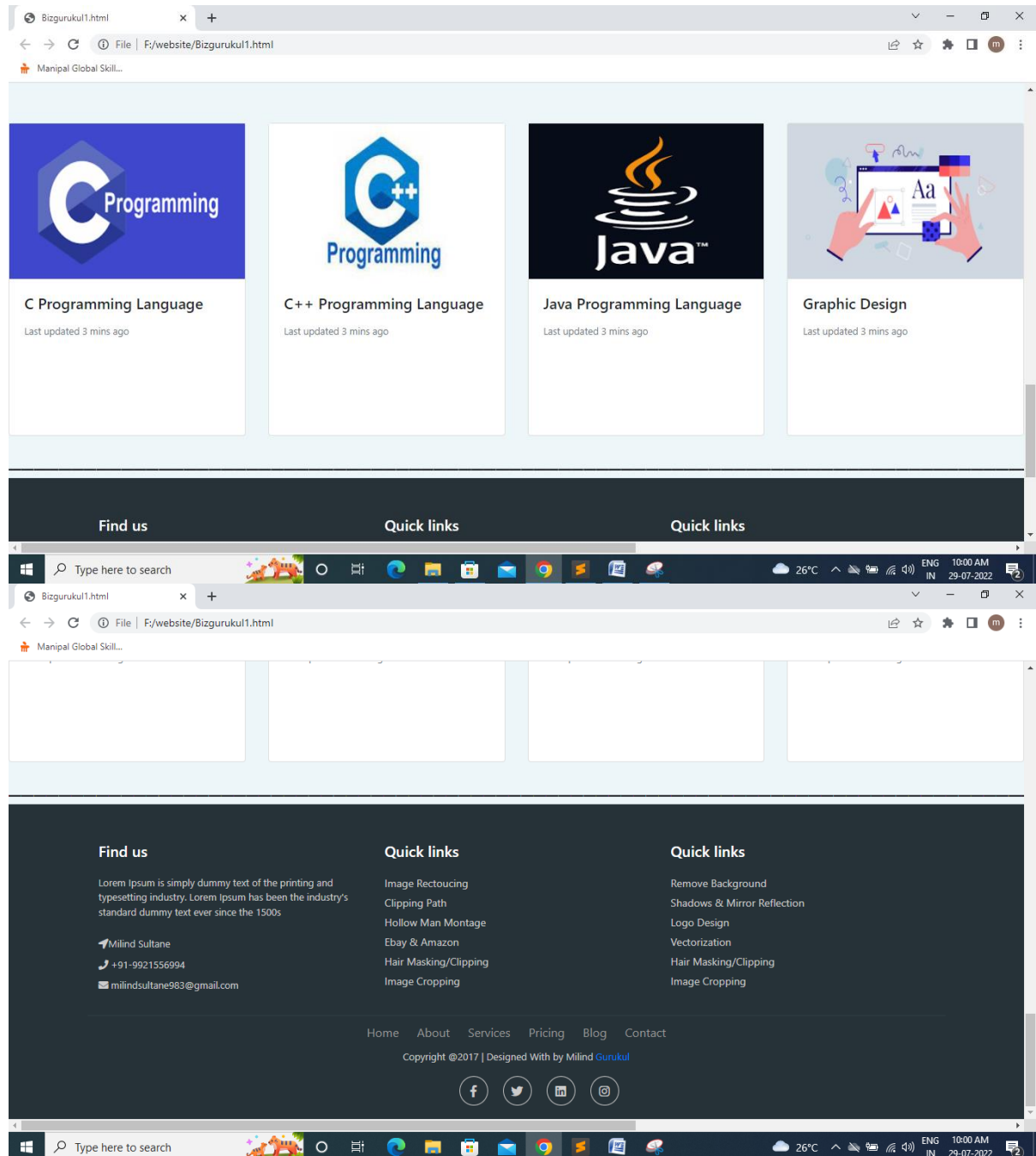


4. Result

This is how my website looks..







5. Conclusion

In this project I successfully created a website (UI) using HTML, CSS, Bootstrap and JavaScript. And I implemented all these things in the website. Using HTML I have created the structure of my webpage. By using CSS in my webpage I have given the style to that structure and by applying different styles my webpage is looking attractive. Using JavaScript I have given the validations to the registration form and login page available in my webpage.

In this way I have created my website.