



## Department of Electrical and Electronics Communication Engineering

### Subject: Full Stack Development

Semester: VI AY 2025-26

Name: Samyak Bakliwal  
Roll No: 1032221792

Class: T. Y. B. Tech.  
Batch: G3

#### Experiment No: 2

Name of the Experiment: Responsive web design using HTML5 and BOOTSTRAP

Performed on:

Submitted on:

Marks	Teacher's Signature with date

**Aim:** Responsive web design using HTML5 and BOOTSTRAP

#### Objective:

- To understand HTML tags
- To learn the styling of web pages using CSS
- To learn Bootstrap Front End Framework.

**Platform:** HTML, CSS, BOOTSTRAP, VSCode

#### THEORY:

Instructions: you are requested to write answer of following questions in A4 size pages.

1. Name some new HTML5 elements useful for structuring a webpage.
2. Explain Bootstrap Grid System.
3. Explain in detail Bootstrap .container and .container-fluid class.
4. What are media queries in CSS?

#### Problem Statement:

Design and develop a responsive web page (For example student registration, course enrollment, library management system, online shopping system etc.) using Bootstrap front end framework. Web pages should contain HTML5 elements (Use all possible formatting for example font, colour etc.).

Web page should include various

- images,
- links within the page,
- tables
- lists
- form elements
- paragraphs
- links to other pages for navigation,
- new tabs.

Use Cascaded Style Sheets (CSS) to style the web pages designed. Make use of

- Three types of styles (Inline, Internal and External)
- border,
- margins,
- padding,
- navigation,
- dropdown list
- tag selector
- class selector
- id selector
- exploring background image and position property etc.

### **Output:**

1. Screenshots of the output of problem statement to be attached.
2. Share GitHub repository link of above project

```
port.html
File Edit View

<!DOCTYPE html>
<html>
<head>
  <title>Portfolio </title>
</head>
<body>
<h1>This is my portfolio</h1>
<hr>
<h2>Samyak Bakliwal</h2>
<p>I am a third year Btech student from <b> MIT WPU </b></p>
<p> I am passionate about technology, creativity, and continuous learning. Currently, I am exploring web development to create amazing online experiences.</p>
<h2>My Hobbies and Interests</h2>
<hr>
  <ul>
    <li><b>Playing Badminton</b></li>
    <li><i>Traveling:</i> Visiting new places and experiencing different cultures.</li>
    <li><u>Photography:</u> Capturing moments through my lens.</li>
  </ul>
</body>
</html>
```

## Samyak Bakliwal

I am a third year Btech student from **MIT WPU**

I am passionate about technology, creativity, and continuous learning. Currently, I am exploring web development to create amazing online experiences.

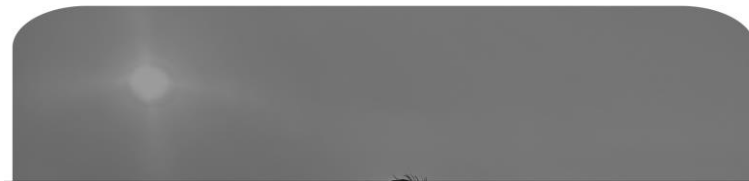
## My Hobbies and Interests

- **Playing Badminton**
- *Traveling:* Visiting new places and experiencing different cultures.
- Photography: Capturing moments through my lens.

## My Favorite Website

One of my favorite websites is [CURA](https://www.curathread.com)

## An Image Example



## My Favorite Website

One of my favorite websites is [CURA](#)

## An Image Example



CURA



## Conclusion:

In this experiment, we explored the fundamental concepts of HTML5, CSS, and Bootstrap to design and develop a responsive web page. By utilizing HTML5 elements, we structured the webpage efficiently, while CSS and Bootstrap enhanced the design and responsiveness.

**Git link -** <https://github.com/samyakbakliwal05/SamyakBakliwal>

## Additional Links:

<https://youtu.be/vpAJ0s5S2t0?si=r378S4khu8O4mPu2>

[https://youtu.be/\\_fBRGDxTnt4?si=EIIZE6HhYXN0b6hk](https://youtu.be/_fBRGDxTnt4?si=EIIZE6HhYXN0b6hk)

## Post lab question:

1. What is a responsive website?
2. How Bootstrap helps to design a responsive website?
3. How does HTML5 improve accessibility in web design?

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Name - Samyak Bakliwal

(fSD) - TY elec. & comp.

PRN - 1032221792

Experiment NO - 2

Theory :-

Q1 Name some new HTML5 elements useful for structuring a webpage.

- <header> :- Defines a header for section / page
- <nav> :- Represents navigation links.
- <section> :- Groups related content.
- <article> :- Represents self-contained content.
- <aside> :- sidebar content / additional information.
- <footer> :- Defines a footer for a section / page.

Q2 Explain Bootstrap Grid system

→ The bootstrap grid system is a 12-column layout that helps create responsive designs using rows, columns & containers. It uses flexbox and is based on breakpoints for different screen sizes.

Q3 Explain in detail bootstrap container & container-fluid class.

→ • container : A fixed-width container that adjusts its width based on screen size (with max width at different breakpoints like small, medium, and large screen). It keeps the content centered & responsive.



- container-fluid:- A full-width container that always spans 100% of the viewport width no matter the screen size. It is used when you want the container to stretch across the entire width on the screen without any max width limitation.

Q4) what is media queries in CSS?

Media queries are used to make your website responsive by applying different CSS style based on the characteristics of the devices on the viewport. This ensures that your website looks good on all screen sizes, from desktops on tablets or smartphone.

#### Post Lab Questions:-

Q1) what is a responsive website?

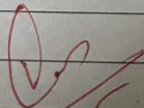
→ A responsive website adjust its layout or design to fit different screen sizes using flexible grids, images or CSS media queries.

Q2) How Bootstrap help in responsive design?

→ Bootstrap provides predefined CSS classes a flexible grid system & responsive utilities that automatically adapt web page for diff. screen sizes.

Q3) How does HTML5 improves accessibility in web design?

→ HTML5 enhances accessibility by introducing semantic elements & better multimedia support improving usability for screen readers & assistive tech.

  
4.2.25