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MIT WORLD PEACE UNIVERSITY | PUNE
TECHNOLOGY, RESEARCH, SOCIAL INNOVATION & PARTNERSHIPS

School of Computer Engineering and Technology
Academic Year: 2023-2024 Sem V
Full Stack Development (FSD)

Lab Assignment : 02

Title: Design and develop a responsive web page using Bootstrap front end framework.

Prepared By
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Batch A1
September 21,2023

Aim:- Design and develop a responsive web page using Bootstrap front end framework.

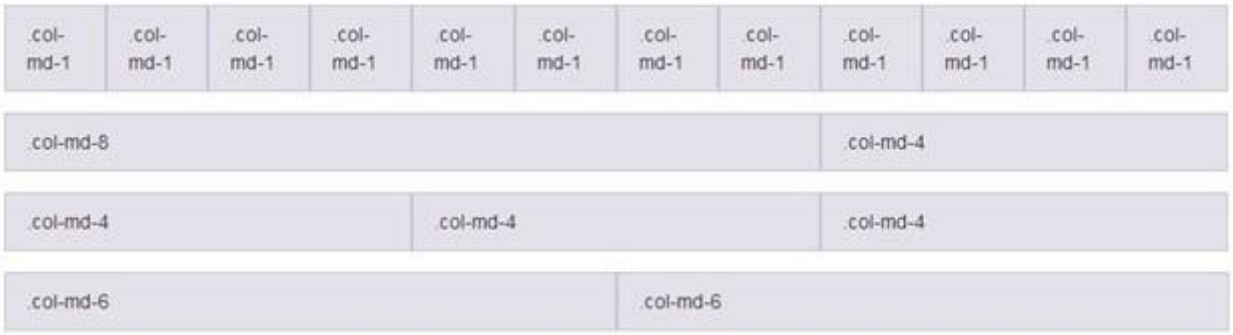
Objectives:

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

Theory:

1. Bootstrap Grid System.

->1)Bootstrap's Grid System is a fundamental part of the framework, designed to help create responsive and mobile-first layouts easily. It's based on a 12-column grid layout, which can be customized to fit various screen sizes.



Bootstrap Grid System

2)Grid Classes:

There are four classes in Bootstrap Grid System:

a) xs (for phones)
b) sm (for tablets)
c) md (for desktops)
d) lg (for larger desktops)

2. Bootstrap .container and .container-fluid class.

A) .container class:

1) Creates a fixed-width container for content.
2) Centers content horizontally on the page.
3) Adds responsive padding to the left and right.
4) Suitable for most web applications.

5) Provides a consistent width for your content.

B) .container-fluid class:

1) Creates a full-width container that spans the entire viewport width.
2) Useful when you want content to take up the entire width of the screen.
3) Offers a responsive layout that adjusts to different screen sizes.
4) Ideal for designs that require a full-width, responsive layout.

FAQ:

1. What is a responsive website?

->A responsive website is a web design approach that aims to make web pages adapt and display effectively on various devices and screen sizes. It ensures that the website's layout, content, and functionality adjust seamlessly to provide an optimal user experience, whether the user is accessing the site on a desktop computer, tablet, smartphone, or any other device. Responsive websites use flexible grids, media queries, and responsive design principles to achieve this adaptability.

2. How Bootstrap helps to design a responsive website?

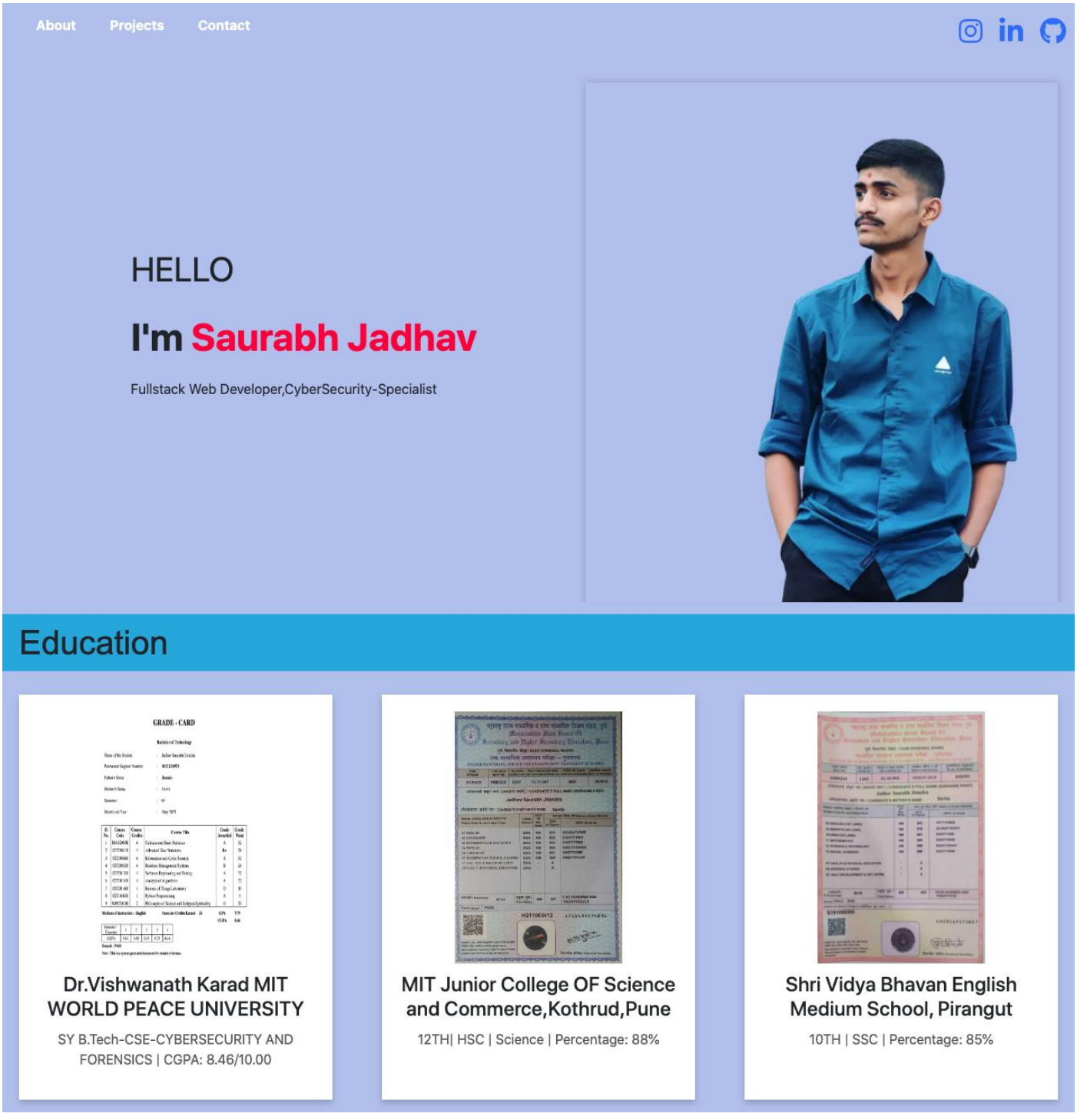
->Bootstrap is a popular front-end framework that greatly simplifies the process of designing and developing responsive websites.

This how Bootstrap helps :-

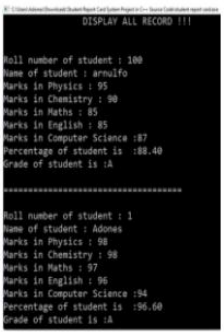
I. Grid System: Bootstrap provides a responsive 12-column grid system that automatically adjusts content layout based on the screen size. This makes it easy to create multi-column layouts that look great on different devices.
II. Pre-built Components: Bootstrap offers a wide range of pre-designed UI components, such as navigation bars, buttons, forms, and modals, all of which are designed with responsiveness in mind.
III. Responsive Utilities: Bootstrap includes responsive utility classes that allow you to show or hide elements based on screen size.
IV. Mobile-First Approach: Bootstrap follows a mobile-first approach, meaning that the default styles are optimized for mobile devices, and you can progressively enhance the design for larger screens using media queries.
V. Media Queries: Bootstrap leverages CSS media queries to make components adapt to different screen sizes. It includes predefined breakpoints for extra-small (xs), small (sm), medium (md), and large (lg) screens, making it easy to target specific devices with custom styles.

VI. Flexbox and CSS Grid Support: Bootstrap 5 has improved support for Flexbox and CSS Grid, making it even more flexible for designing complex and responsive layouts.

Implementation Screenshot:-
Github Repository Link:- https://github.com/Saurabh3207/simpleportfolio



Projects



Student Management System

The Student Report Card system is developed using C++ Programming Language and different variables, strings, and classes have been used for its development of it. To store the data it uses C++ OOPs and file-handling concepts.

EliHealthBot

AI-powered chatbot connects you with valuable health information, answers your queries, and assists you in finding nearby medical facilities.

Calculator

A simple calculator using HTML, CSS, JS

Github Repository Link

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Conclusion:- Thus we Learn and implemented HTML,CSS and Bootstrap and developed a responsive portfolio website.