

FULL STACK PROJECT REPORT

On

< Student Portfolio Hosting Site >

Submitted by

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Foremost, I want to offer this endeavor to **Almighty** for the wisdom he bestowed upon us and good health in order to finish this report.

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ABSTRACT

At its most basic form, a portfolio website provides professional information about an individual or a company and presents a showcase of their work or talent online. In today's digital world, a portfolio is arguably more important than a resume, no matter what industry you work in.

This report provides a detailed summary of the project “**Student Portfolio Hosting Site**”. The report includes a description of the topic and provides a detailed description of the work done till point.

Included in the report are the detailed descriptions of the work done: snapshots of the implementations, various approaches, and tools used so far.



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DECLARATION

We hereby declare that the work which is being presented in the Full Stack Project “**Title -Student Portfolio Hosting Site**”, is an authentic record of our own work carried under the supervision of “**Mr. Pankaj Kapoor**”.

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INTRODUCTION

What is a Portfolio Website?

A portfolio website is a unique way to showcase your work and let others know about you and your work. It's like a every time platform for your projects, case studies, and information about you.

Having your own website means other persons are always able to find you and if interested, reach out for you. If you don't have an online presence nowadays, you are behind the time. A portfolio is a great way for photographers, designers, developers and a wide range of artists to present their work online. It lets you reflect your identity through your works. At its most basic form, it provides professional information about an individual or a company and presents a showcase of their work.

In today's digital world, a portfolio is arguably more important than a resume, no matter what industry you work in. Whether you are a freelance journalist, a recent college graduate looking for a job, or even an accountant.

In other words, it is simply an extension of an individual's resume. It provides a convenient way for potential clients to view your work while also allowing you to expand your skills and services. However, this isn't the ultimate purpose of a portfolio website. The ultimate purpose of a portfolio website is to provide a way for you to land more clients, whether that means freelance work, more clients for your agency or employment at a company / organization. You should decide what you want to accomplish with your website before adding content to it.

Why do we need a Portfolio Website?

In a nutshell, you need a portfolio website to showcase your work. Whether you're an individual, a small team of two or a company of hundred people, it's crucial that you have a unique online approach.

Student Portfolio Hosting Site

A website portfolio will help you stand out from the crowd, show your uniqueness, build trust, and make sure that others can actually find you.

It is essentially a showcase of your work and skills. Your landing page needs to say who you are and explain what you do. You should also have a detailed About page that provides your educational background, profile, goals, interests and online resume.

Basic sections in a Portfolio Website:

There are certain components of a portfolio website that needs to be there in an individual's portfolio site or the template. These are:

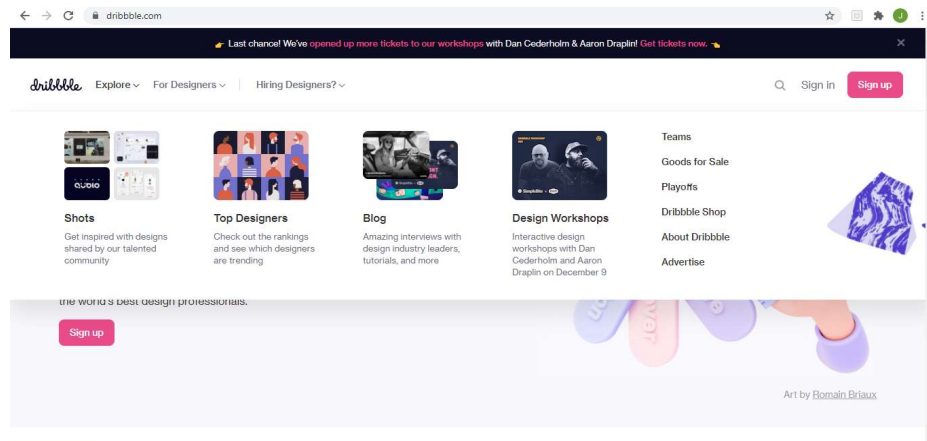
- **Portfolio of your work**
This is the section on your site where you present a selection of your past work.
- **About**
This section should be written in a context that's relevant and compelling to the types of clients you want to work with.
- **Services**
This is a list of the skills and service offerings. Some choose to put this section within their "About" section. Providing this information lets interested people know that they're on the correct website.
- **Contact**
This section tells people how they can get in touch with you.



Some Portfolio Hosting Sites:

Few of the widely used portfolio hosting sites are:

- Dribbble

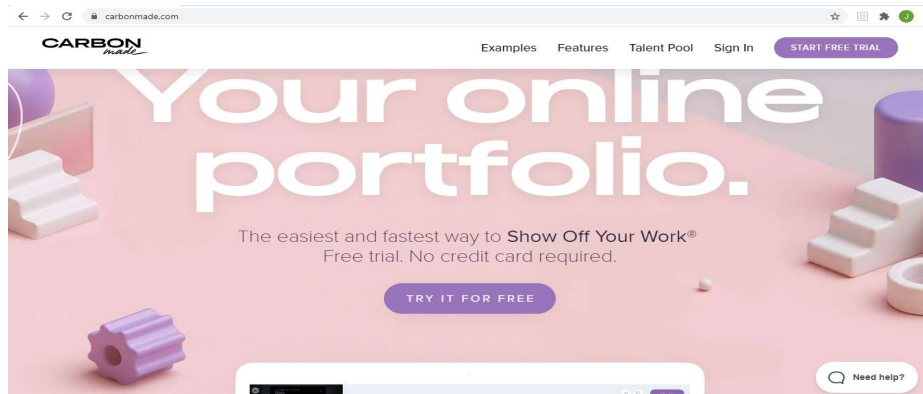


- Crevado



Student Portfolio Hosting Site

- Carbonmade



It only takes a few seconds to lose a visitor's attention, so we should make sure that we use these seconds smartly. The potential clients will see the visuals first and if they like what they see, they will continue looking for more details. In other words, one needs an awesome and appealing presentation of his / her works through his portfolio.

We should take our portfolio as an opportunity to surprise and impress the potential clients. A portfolio website lets you show off all of your work in one place. This not only looks good to a client, but it can also help inspire one on their next projects.

TECHNOLOGY USED FOR THE PROJECT

Frontend and Backend are two most popular terms used in the field of web development. These terms are very crucial for web development but are quite different from each other. Each side needs to communicate and operate effectively with the other as a single unit to improve the website's functionality.

Front End Development:

The part of a website that user interacts with directly is termed as front end. It is also referred to as the 'client side' of the application. It includes everything that users experience directly: text colors and styles, images, graphs and tables, buttons, colors, and navigation menu. HTML, CSS and JavaScript are the languages used for Front End development.

The structure, design, behavior, and content of everything seen on browser screen when websites, web applications, or mobile apps are opened up, is implemented by front End developers. Responsiveness and performance are two main objectives of the front End. The developer must ensure that the site is responsive i.e. it appears correctly on devices of all sizes no part of the website should behave abnormally irrespective of the size of the screen.

Backend Development:

Backend is server side of the website. It stores and arranges data, and also makes sure everything on the client-side of the website works fine. It is the part of the website that you cannot see and interact with. It is the portion of software that does not come in direct contact with the users.

The parts and characteristics developed by backend designers are indirectly accessed by users through a front-end application. Activities, like writing APIs, creating libraries, and working with system components without user interfaces or even systems of scientific programming, are also included in the backend.

Front end Languages and framework used for the project:

The front-end portion of the website is built by using languages which are discussed below:

- **HTML:**

HTML stands for Hyper Text Mark-up Language. It is used to design web pages using mark-up language. It is the combination of Hypertext and Mark-up language. Hypertext defines the link between the web pages whereas mark-up language is used to define the text document within tag which defines the structure of web pages. This language is used to annotate text so that a machine can understand it and manipulate text accordingly. Most of the mark-up languages are human readable.

HTML is a mark-up language used by the browser to manipulate text, images and other content, in order to display it in the required format. HTML was created by Tim Berners-Lee in 1991. The first ever version of HTML was HTML 1.0, but the first standard version was HTML 2.0, published in 1999. The basic structure of an HTML page contains essential building-block elements such as doctype declaration, html, head, title, and body elements upon which all the webpages are created.

An HTML document can be created using any text editor. Save the text file using **.html** or **.htm**. Once saved as an HTML document, the file can be opened as a webpage in the browser.

Some features of HTML are:

- It is easy to learn and easy to use.
- It is platform independent.
- Images, video and audio can be added to a web page.
- Hypertext can be added to text.

Some advantages and disadvantages of HTML are:

- HTML is used to build websites.
- It is supported by all browsers.

- It can be integrated with languages like CSS, JavaScript, etc.
- Can only create static webpages.
- Large amount of needs to be written to create a simple web page.
- Security feature is not good.

- **CSS:**

Cascading Style Sheets, fondly referred to as **CSS**, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each web page. CSS is easy to learn and understood but it provides powerful control over the presentation of an HTML document.

A CSS comprises of style rules that are interpreted by the browser and then applied to the corresponding elements in your document. A style rule set consists of a selector and declaration block.

The selector points to the HTML element you want to style and the declaration block contains one or more declarations separated by semicolons.

Each declaration includes a CSS property name and a value, Separated by a colon.

Example: colour is property and blue the value, font size is property and 12 px is the value.

Different types of CSS selectors are:

- Universal Selector
- Element Selector
- Descendent Selector
- ID Selector
- Class Selector

- **JavaScript:**

JavaScript is a lightweight, cross-platform and interpreted scripting language. It is well-known for the development of web-pages, many

non-browser environments also use it. JavaScript can be used for client-side developments as well as server-side developments.

JavaScript contains a standard library of objects, like array, date and math and a core set of language elements like operators, control structures, and statements.

JavaScript was created in 1995 by Brendan Eich while he was an engineer at Netscape. It was originally going to be named LiveScript but was renamed. Unlike most programming languages, the JavaScript language has no concept of input or output. It is designed to run as a scripting language in a host environment, and it is up to the host environment to provide mechanisms for communicating with the outside world. The most common host environment is the browser.

Some features of JavaScript are:

- JavaScript was created in the first place for DOM manipulation. Earlier websites were mostly static, after JS was created dynamic Web sites were made.
- Functions in JS are objects. They may have properties and methods just like another object. They can be passed as arguments in other functions.
- Can handle date and time.
- Performs Form Validation although the forms are created using HTML.
- No compiler needed.

Some platforms for JavaScript are:

- Web Development
- Web Applications
- Server Applications
- Games
- Smartwatches
- Machine Learning

Some limitations of JavaScript are:

- **Performance:** It does not provide the same level of performance as offered by many traditional languages as a complex program written in JS would be comparatively slow.

- **Complexity:** To master a scripting language, programmers must have a thorough knowledge of all the programming concepts, core language objects, client and server-side objects otherwise it would be difficult for them to write advance scripts using JavaScript.
 - **Weak error handling and type checking facilities:** It is weakly typed language as there is no need to specify the data type of the variable. So wrong type checking is not performed by compiler.
-
- **jQuery:**

jQuery is an open source JavaScript library that simplifies the interactions between an HTML/CSS document, or more precisely the Document Object Model (DOM), and JavaScript.

Elaborating the terms, jQuery simplifies HTML document traversing and manipulation, browser event handling, DOM animations, Ajax interactions, and cross-browser JavaScript development.

It is incredibly popular, which is to say it has a large community of users and contributors who participate as developers and evangelists.

Some advantages and disadvantages of jQuery are:

- It has wide range of plug-ins which allows developers to create plug-ins on top of the JavaScript library.
- It has a large development community.
- It provides a good and comprehensive documentation.
- It is easy to use as compared to standard java-script and other java-script libraries.
- Being light-weight and a powerful chaining capability makes jQuery strong.
- While jQuery has an impressive library in terms of quantity, depending on how much customization you require on your website, functionality maybe limited thus, using java-script maybe inevitable in some cases.
- The jQuery java-script file is required to run jQuery commands, while the size of this file is relatively small,

it is still a strain on the client computer and maybe web server as well if you intend to host the jQuery script on your own web server.

- **Bootstrap:**

Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first web sites.

It solves many problems which we had once, one of which is the cross-browser compatibility issue. Nowadays, the websites are perfect for all the browsers (IE, Firefox and Chrome) and for all sizes of screens (Desktop, Tablets, Phablets, and Phones).

It provides faster and Easier Web-Development and creates platform independent web-pages. It creates Responsive Web-pages and is designed to be responsive for mobile devices as well.

Websites which were built with a lot of CSS and JavaScript can now be built with a few lines of code using Bootstrap. Bootstrap comprises of mainly three components:

- CSS
- Fonts
- JavaScript

SOFTWARE USED FOR THE PROJECT

- **vsCode:**

Visual Studio Code is a free source-code editor made by Microsoft for Windows, Linux and macOS. Its features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. It is one of the most popular source code-editor used by the programmers. It's fast, lightweight and a powerful tool. Microsoft designed VSC as a cross-platform code editor for writing web and cloud applications.

- **GitHub:**

GitHub is a web-based version-control and collaboration platform for software developers. Microsoft, the biggest single contributor to GitHub, initiated an acquisition of GitHub for \$7.5 billion in June, 2018. GitHub, which is delivered through a software-as-a-service (SaaS) business model, was started in 2008 and was founded on Git, an open source code management system created by Linus Torvalds to make software builds faster.

- **Git:**

Git is used to store the source code for a project and track the complete history of all changes to that code. It allows developers to collaborate on a project more effectively by providing tools for managing possibly conflicting changes from multiple developers. GitHub allows developers to change, adapt and improve software from its public repositories for free, but it charges for private repositories, offering various paid plans. Each public or private repository contains all of a project's files, as well as each file's revision history. Repositories can have multiple collaborators and can be either public or private.

- **Browser:**

A web browser is a software application for accessing information on the World Wide Web. When a user requests a web page from a particular website, the web browser retrieves the necessary content from a web server and then displays the page on the user's device. Ex. Google chrome, Opera mini etc.

ABOUT THE PROJECT

Motivation:

The main motivation behind creating the **student portfolio hosting site** is to overcome the problem that is faced by most of the young generation or the skilled people who cannot showcase their talent due to lack of the resources.

In this era of digital world everything is getting digitally connected over internet. So, this website aims or focuses at helping the talented minds and the job recruiters getting connected over the internet.

In this digital world, everyone is in the search of the online alternatives to a problem instead of the offline one and are preferring them as well.

Problem Statement:

As seeing the present scenario or the situation, skilled individuals in various fields are suffering from a lack of interactive and aesthetically pleasing ways to present their skills.

The current solutions are either just for the designing skills or are not interactive enough. Companies also want to hire those having best skills but it is difficult to showcase a person's skills in their fields.

As the offline mode of placement and for getting jobs is shifting to online, we have tried our best to present a solution and an alternative for people to communicate or showcase their talent, their interests, projects and other works or skills with a wide audience via a portfolio hosting site. We are trying to expand their skills from just a paper of resume to an online platform like this site.

Overview of the site:

This is a project in which we created a portfolio hosting website where users can host their portfolios. This would include their projects, personal information, educational details, work experience, and many other things as well.

The home page of the site is having a simple layout with abstract design and having options of Login and Signup for the user. The home page would ask the user to choose an option whether the user is looking to hire someone or is looking forward to host their portfolio.

For each of those two categories we have designed two separate pages.

Note: Here onwards the hiring section of the site would be referred to as 'A' and the one for hosting as 'B'.

In the page A, the user will have the option to search for profiles based on the requirements (like designing, programming, python specialist, web developer, ML specialist etc.), so that they can hire people according to their need while being able to see their projects along with other complete details.

In the page B, the user will have the option to either login or register and enter their personal information like their educational details, work experience skills, project details, certifications and profile photo etc. using an intuitive GUI (Graphical User Interface).

Afterwards, they would be asked to pick from pre-made templates and all their details will be arranged according to the template chosen.

We have a separate page for each hosted user like blazon.live /janedoe etc.

After the basic profile is created, we give them the choice to edit their skills or other details that they have entered in the final site.

SOFTWARE HARDWARE REQUIREMENTS

The particular software and hardware requirements are:

1. Software Requirements:

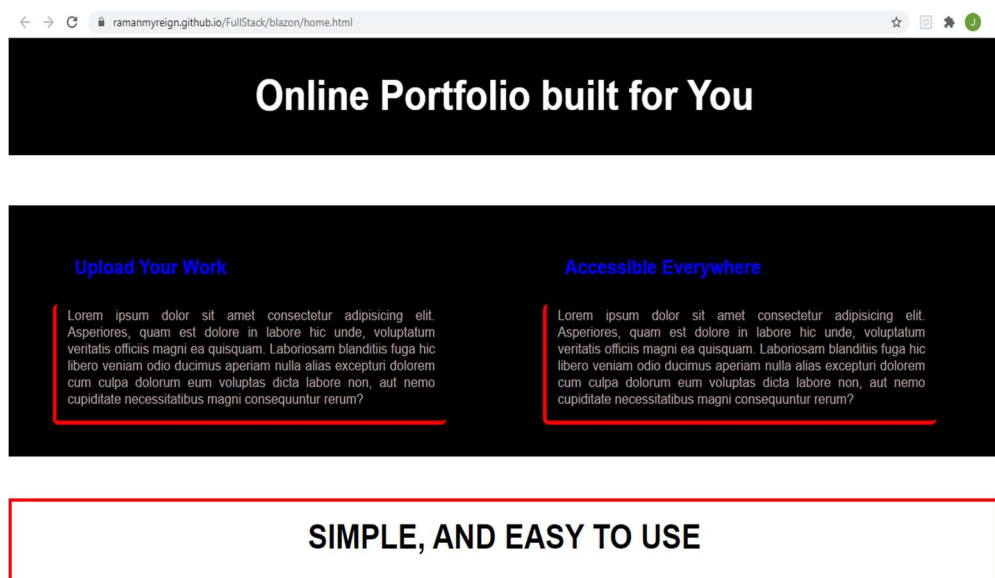
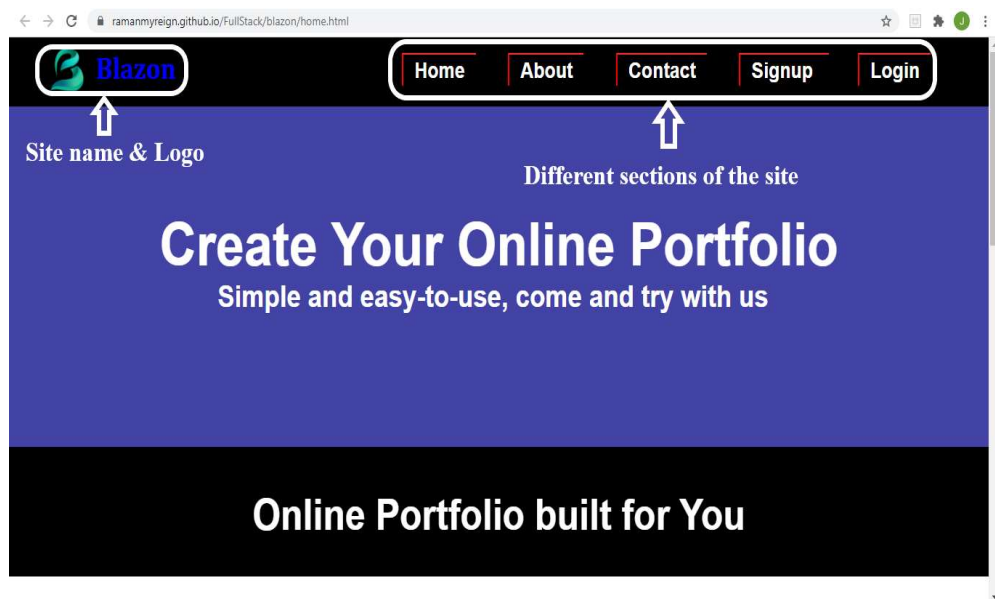
- Visual Studio Code
- GitHub
- Any Web Browser

2. Hardware Requirements:

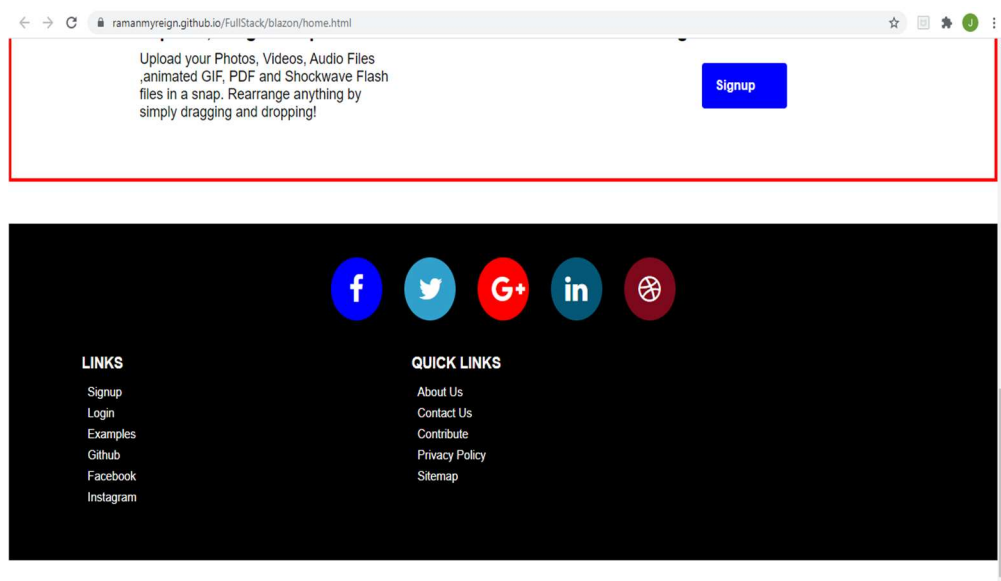
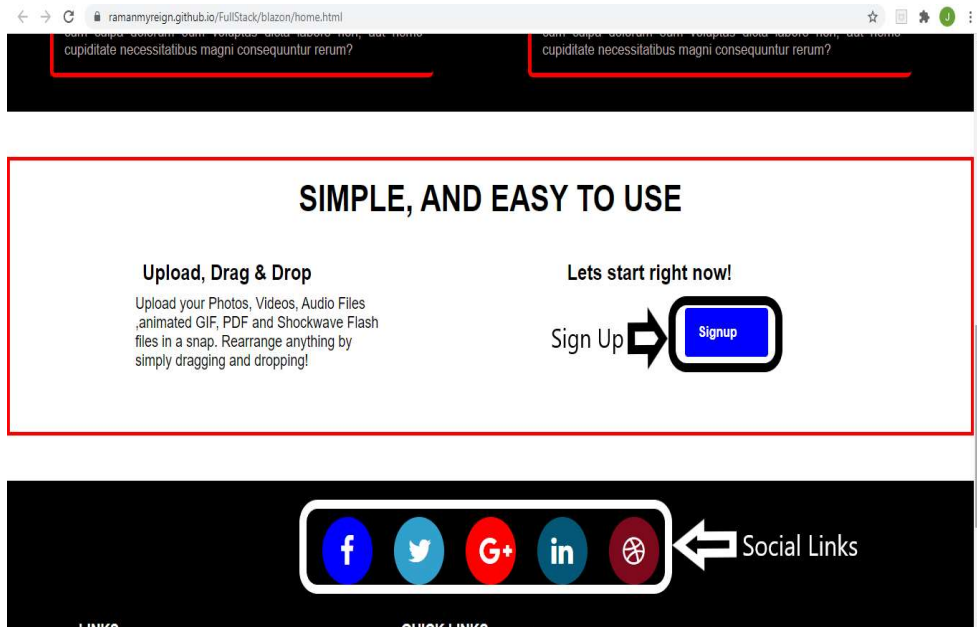
- Windows10
 - Ubuntu
 - Mac
 - i3 or higher
 - 4GB RAM or higher
- } anyone from these

IMPLEMENTATION OF BLAZON

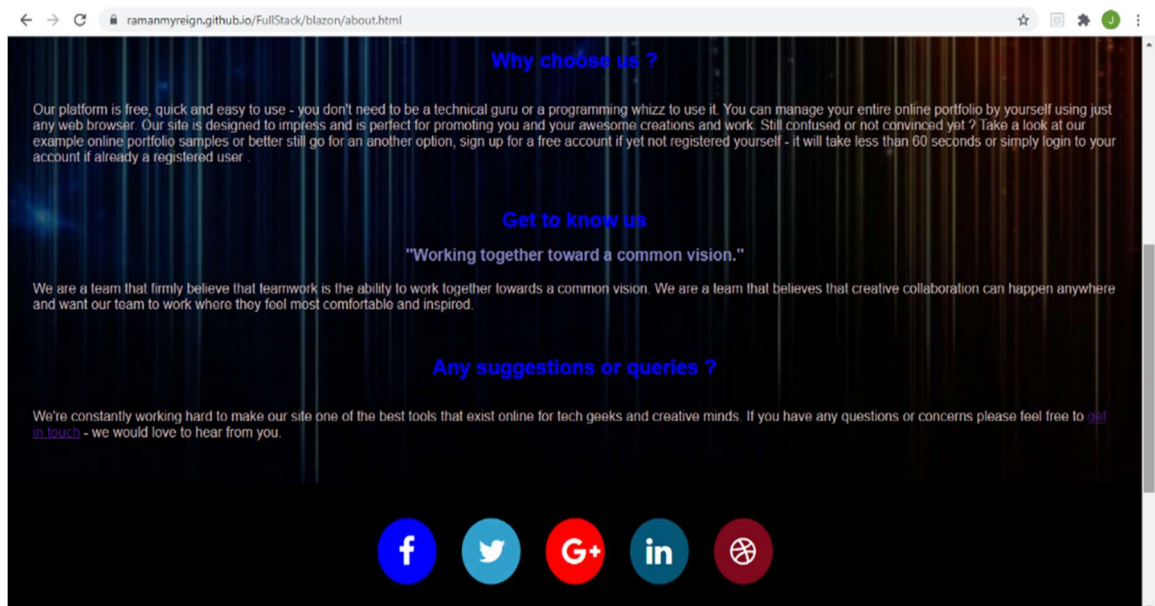
- Home page of Blazon



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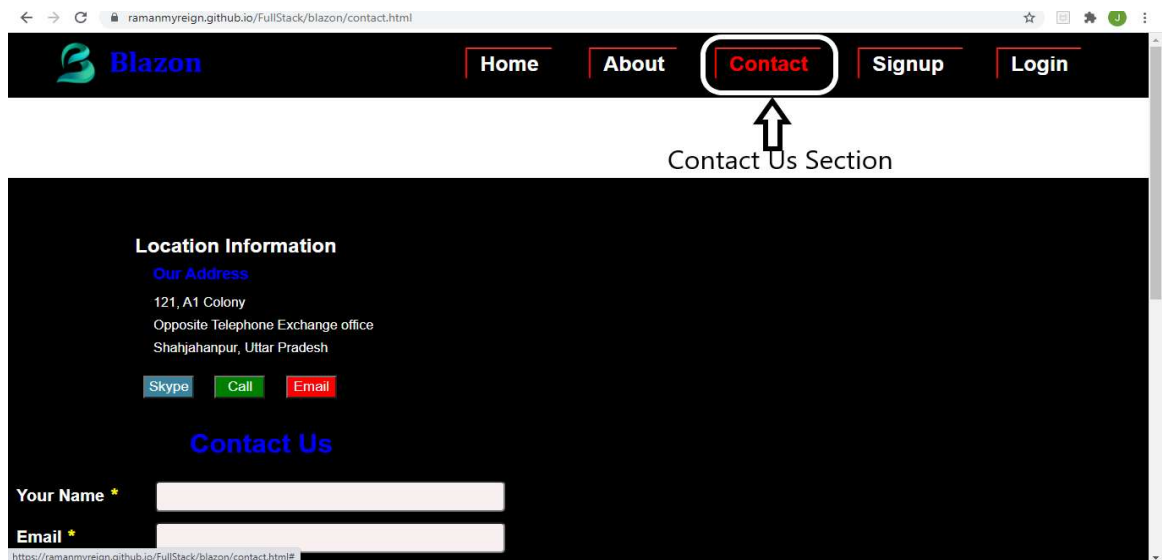


- About Us section of Blazon

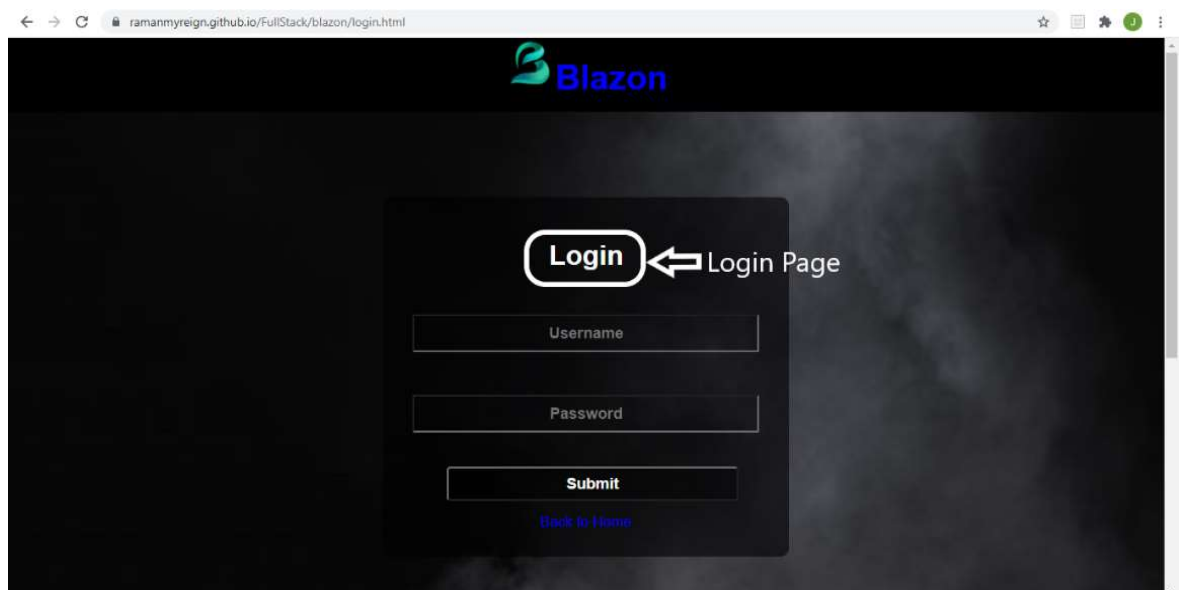
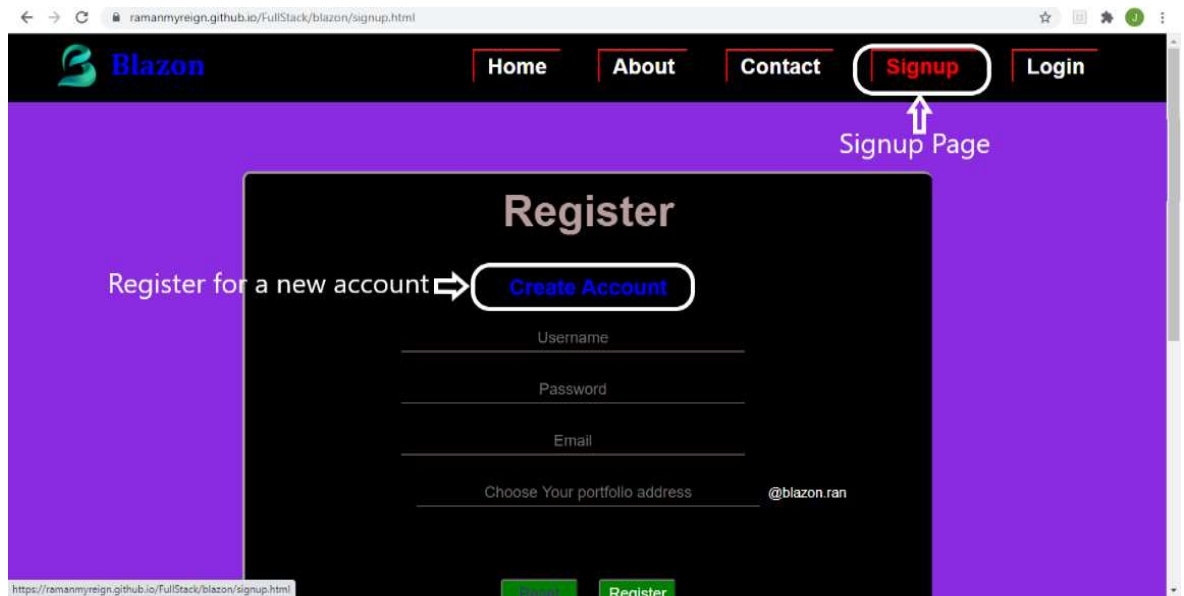


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- Contact Section of Blazon

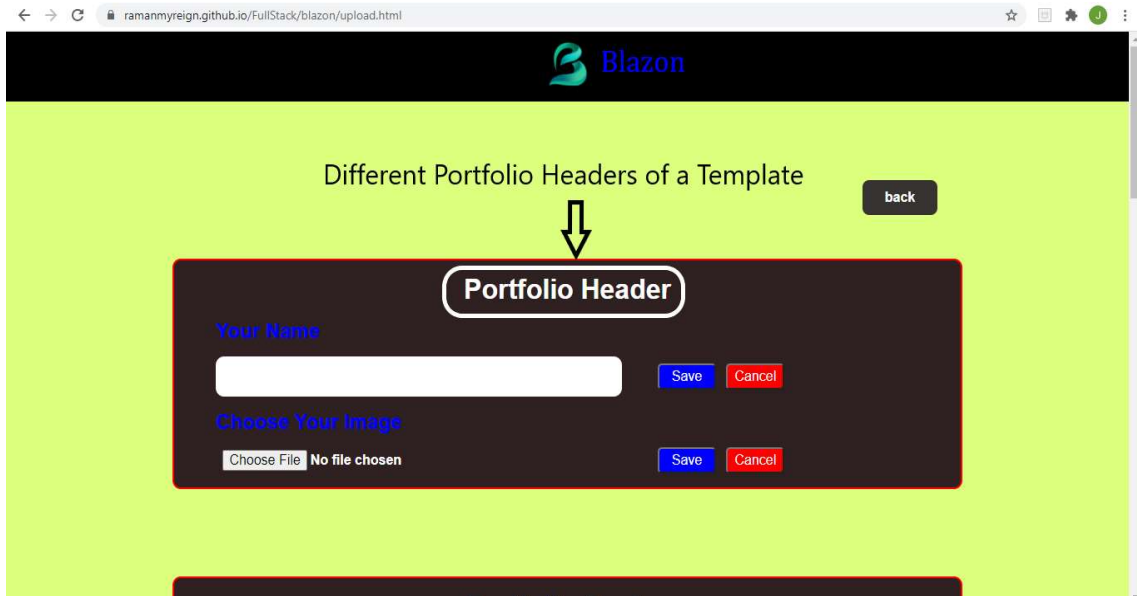


- New User Registration and login Section

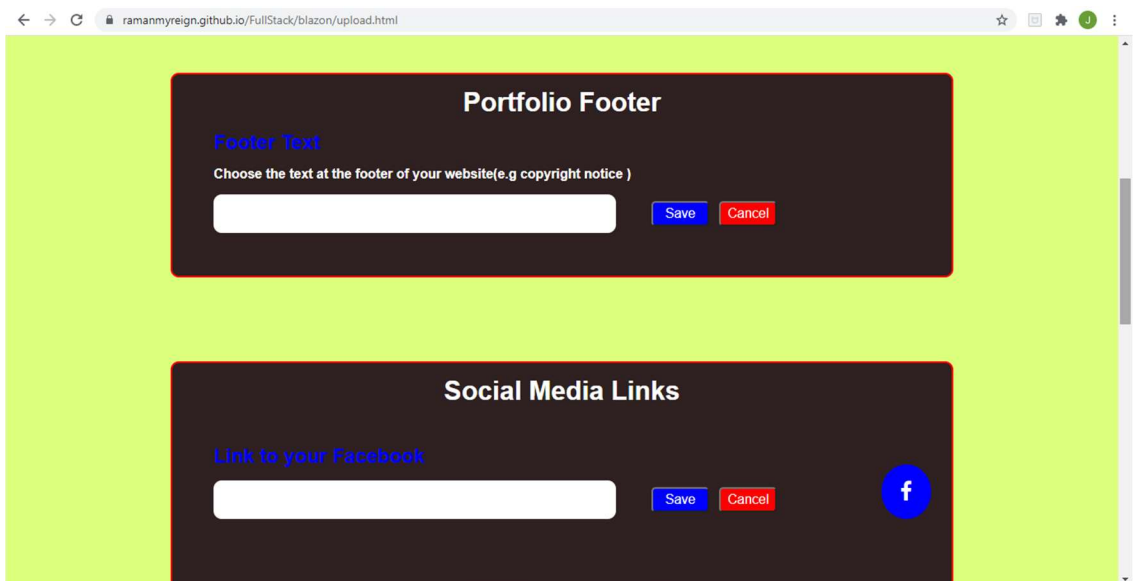


Student Portfolio Hosting Site

- Portfolio template



A screenshot of a web browser showing the 'Blazon' portfolio template upload page. The browser's address bar displays 'ramanmyreign.github.io/FullStack/blazon/upload.html'. The page has a black header with the 'Blazon' logo. The main content area has a light green background and is titled 'Different Portfolio Headers of a Template'. A black arrow points down to a dark grey form box labeled 'Portfolio Header'. Inside this box, there is a 'Your Name' label above a text input field, with 'Save' and 'Cancel' buttons to its right. Below that is a 'Choose Your Image' label above a file selection area showing 'Choose File' and 'No file chosen', also with 'Save' and 'Cancel' buttons. A 'back' button is located in the top right corner of the form area.



A screenshot of the same web browser showing the 'Blazon' portfolio template upload page, but scrolled down to show the 'Portfolio Footer' and 'Social Media Links' sections. The 'Portfolio Footer' section is a dark grey form box with a 'Footer Text' label, a sub-label 'Choose the text at the footer of your website(e.g copyright notice)', a text input field, and 'Save' and 'Cancel' buttons. Below it is the 'Social Media Links' section, another dark grey form box with a 'Link to your Facebook' label, a text input field, 'Save' and 'Cancel' buttons, and a blue circular Facebook icon on the right.

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A screenshot of a web browser displaying a form titled "Social Media Links" with the subtitle "Link your different social media links". The form is set against a dark background with light green sidebars. It contains three visible sections, each with a label, a text input field, and "Save" and "Cancel" buttons. The first section is for Facebook, the second for LinkedIn, and the third for Instagram. Each section is accompanied by its respective social media icon on the right.

← Social Media Links Link your different social media links

Link to your Facebook

Save Cancel

Link to your LinkedIn

Save Cancel

Link to your Instagram

Save Cancel

A screenshot of the same "Social Media Links" form, showing the bottom four sections: Github, Google-Plus, Twitter, and Youtube. The layout is consistent with the previous screenshot, featuring labels, input fields, "Save" and "Cancel" buttons, and social media icons on a dark background with light green sidebars.

Link to your Github

Save Cancel

Link to your Google-Plus

Save Cancel

Link to your Twitter

Save Cancel

Link to your Youtube

Save Cancel

IMPROVEMENTS / POSSIBLE WORK

The improvements that can be made or the possible future work that can be done in this field can be using back – end technologies as well along with the front – end, so that the data or the information of a particular user can be stored in the database that will make it easy for them to access or edit their information with time.

We could add a testimonial section where we should get into the habit of requesting a testimonial from every client or user we work with, and showcase our best testimonials on the homepage using sliders or rows.

We can introduce a FAQ section which can be a great place to address all questions and concerns, and it can even cut back on the number of questions and comments we receive from potential clients or users.

CONCLUSION

We tried to solve the problem of jobless people and freshers by creating a website which provides users with a facility to host their portfolios with different attractive layout design available.

User can enter the information about their education details, works, projects, and other skills so that they can be easily hired and also the recruiters or the recruiting companies or those who want to hire can have the options to choose from a bunch of portfolios as per their need and according to their requirements.