

# **FULL STACK USING NODEJS PROJECT- II (2021-22)**

## **“MODEL PORTFOLIO TEMPLATE”**

### **Project Report**



**Institute of Engineering & Technology**

**Submitted By -**

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## **Declaration**

I hereby declare that the work which is being presented in the Bachelor of technology. Project “**Model Portfolio Template**”, in partial fulfillment of the requirements for the award of the *Bachelor of Technology* in Computer Science and Engineering and submitted to the Department of Computer Engineering and Applications of GLA University, Mathura, is an authentic record of my/our own work carried under the supervision of **Mr. Mandeep Singh, Technical Trainer, Dept. of CEA, GLA University.**

The contents of this project report, in full or in parts, have not been submitted to any other Institute or University for the award of any degree.

**Sign :** *RitikGupta*

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## **Certificate**

This is to certify that the project entitled “**Model Portfolio Template**”, carried out in **Full Stack Using Nodejs Project – II** Lab, is a bonafide work by **Ritik Gupta** and is submitted in partial fulfillment of the requirements for the award of the degree Bachelor of Technology (Computer Science & Engineering).

**Signature of Supervisor:**

**Name of Supervisor:** Mr. Mandeep Singh

**Date:**

## Training Certificates

- **Ritik Gupta**





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## **ACKNOWLEDGEMENT**

Presenting the ascribed project paper report in this very simple and official form, we would like to place my deep gratitude to GLA University for providing us the instructor :

Mr. Mandeep Singh, our Technical Trainer and Supervisor.

He has been helping us since Day 1 in this project. He provided us with the roadmap, the basic guidelines explaining on how to work on the project. He has been conducting regular meeting to check the progress of the project and providing us with the resources related to the project. Without his help, we wouldn't have been able to complete this project.

And at last but not the least we would like to thank our dear parents for helping us to grab this opportunity to get trained and also my colleagues who helped me find resources during the training.

Thanking You

**Sign:** *RitikGupta*

**Name of Candidate:** Ritik Gupta

**University Roll No:** 191500659

## **ABSTRACT**

In this project, we are creating a Full Stack Template using Nodejs, basically a portfolio which we have named Model Portfolio Template. This website will provide us a platform to access the details (biodata) we want to read at the ease of our fingertips. All the users can create their own portfolio by using this website by making some changes to this website and make their own portfolio showing their details and can apply for a job using this portfolio and can impressed the company's officials. The user wishes to edit will be entered by him in the various fields which works on the basis of queries input. The query may be an user name, the projects name and the skills to which he/she is known for and will also work on resume input with a short description about user. The website is suitable in the present scenario as the world is being digitalized then why not the education system. On the profile of the user, one can easily view the whole profile he/she has design. The app will be completely efficient and transparent to the reviews of the people on the book and its price. To get more details about the website one can click on the Get in Touch option where viewer can demand for more details to the user email id. This app will be using GitHub API for providing all the projects. Further the use of Instagram API section provides all the necessary details that the user may need about the website.

Web Development ecosystem is diverse and is changing people's life all over the world. Websites users are expected to increase because of the advance changes of the operating system and the way it deals with issues and compatibility with other mobile devices. Furthermore designing solutions for the problems that we may face in future is essential. Like this application definitely stands the need of students at any time at their fingertips without any barrier of place.

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# **CHAPTER-1**

## **INTRODUCTION**

### **1.1 CONTEXT**

This Portfolio Website “Model Portfolio Template” has been submitted in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering at GLA University, Mathura supervised by Mr. Mandeep Singh. This project has been completed approximately two weeks and has been executed in modules, meetings have been organised to check the progress of the work and for instructions and guidelines.

### **1.2 MOTIVATION**

In the recent years, we have realized the importance of virtual learning and how important it is for us to have our resources online. Portfolios have been the greatest source of expressing oneself on all the while and having them at the reach of our fingertips would be an opportunity hardly any student would afford to miss.

In the century we are living the world is progressing at a really great pace, a lot number of technologies come up every single day. To keep up with the technology is also important to survive in this world of digitalization and learning. Along with this we need to have a place to keep the resources for areas of our interest so we thought of developing a website which could provide us with virtual details of user as well as a platform where we could keep the records and achievements we like marked.

Moreover this kind of application can be used in areas/colleges where user can express his/her details in front of interviewer. This would be an excellent effort to provide education without any boundaries to all.

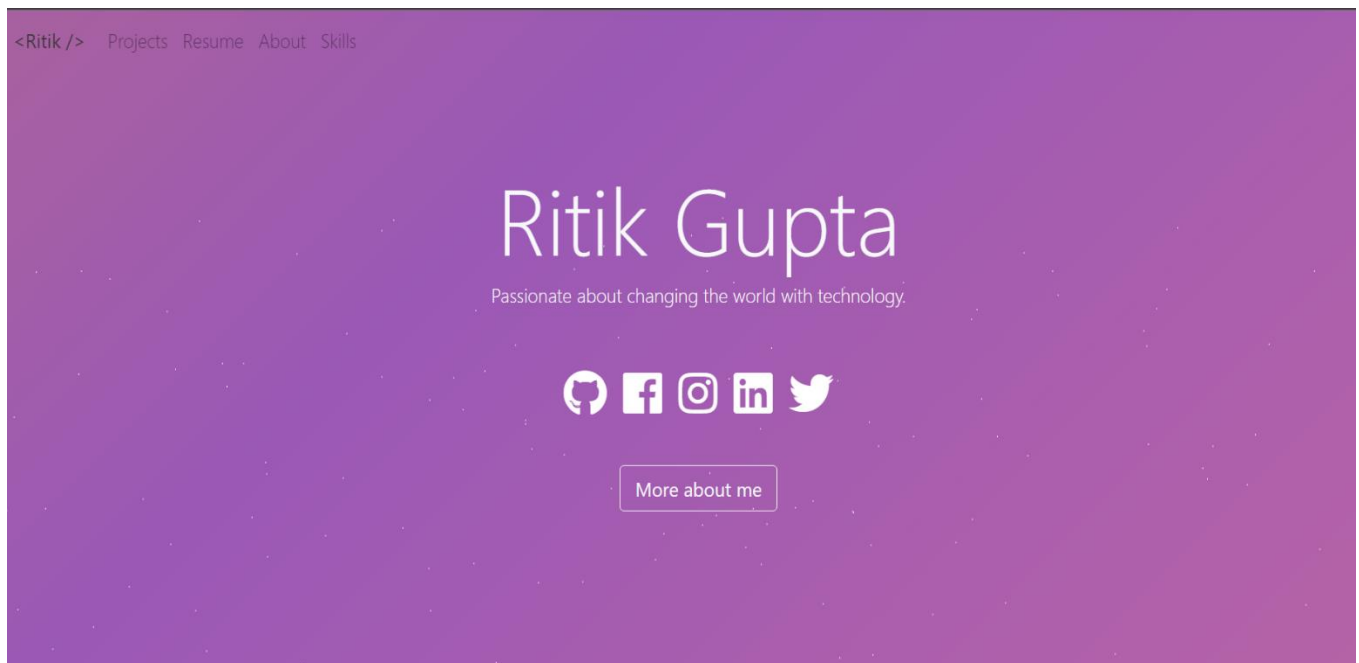
### **1.3 OBJECTIVE**

The main objective of this application is to create a portfolio website named “Model Portfolio Template” which will have a lot of details and a space to keep the records one wants to see.

There will be a facility to search any jobs one wishes to apply by the use of any keyword like the company name, user name, the name of the projects. After the search there will be list of related companies and one can view and read more about the details of the user and can further select it.

## 1.4 EXISTING SYSTEM

In the present scenario, we are dealing with the manual searching of portfolios from thousands of other websites present in Google . With the help of this website we are able to find a place where we can easily showcase ourselves with the help of keywords. As this idea as already implemented here are the some snap how our website will look.



**Figure-1: Existing System**

## 1.5 SOURCES

The source of our project (including all the project work, documentations and presentations) will be available at the following link:-

[https://github.com/ritikgupta2109/Model\\_Portfolio\\_Template](https://github.com/ritikgupta2109/Model_Portfolio_Template)

## **CHAPTER -2**

# **SOFTWARE REQUIREMENT ANALYSIS**

## **2.1 IMPACT OF PORTFOLIOS ON DAILY LIFE**

Portfolios are considered as the best for students in a real sense, and it is said that they are also the best companions of students. They play a significant role in Student's life. Portfolios give plenty of joy to students, and they learn a lot of things for which they prepare for. They take them into a unique world of imagination and improve their standard of living.

## **2.2 PROBLEM STATEMENT**

The Portfolio site “Model Portfolio Template” is an Web Application which will allow the users to make his/her own portfolio with resume for company's perspective using either user name, decription , resume, projects, and the skills. Actually this website is connected to the GitHub API and Instagram API. Linking of website with these API is a huge task.

## **2.3 HARDWARE AND SOFTWARE REQUIREMENTS**

### **Hardware Requirement**

- Processor :intel i5
- Operating System :Any Operating System
- RAM : 8 GB (or higher)
- Hard disk : 256GB

## **Software Requirement**

- Software used: Visual Studio Code
- Language used : HTML, CSS, Javascript
- Technologies: NodeJS, React, Bootstrap4. Redux
- User Interface Design : Web Application

## **2.4 MODULES AND FUNCTIONALITIES**

- **Navigation Drawer:** It navigates from top to bottom while pressing on each option like about, projects, skills, resume, get in touch button.
- **Dashboard Section:** Showing UI/UX design with user name , task bar showing clickable options.
- **About Section:** Display short description about user with user's photo and his/her resume.
- **Projects Section:** Show some projects of user's using GitHub API.
- **Skills Section :** Display user's skills both Technical and Soft skills
- **Get in Touch Section :** Display the viewer queries will mail to user's email id given on footer.
- 

## **2.5 MODEL PORTFOLIO TEMPLATE – WEB APPLICATION**

Model Portfolio Template is actually a library of skills and achievements. Portfolio is the place with the collection some libraries will be having a collection of millions of records of their arrangement and maintenance is also important. Even the experienced companys may fail to find a particular portfolio and its location so here is when an web application “Portfolio” comes into picture.

## **CHAPTER-3**

### **TECHNOLOGY USED**

#### **3.1.1 NodeJS**

Node.js uses asynchronous programming! A common task for a web server can be to open a file on the server and return the content to the client. Sends the task to the computer's file system. Waits while the file system opens and reads the file.

#### **3.1.2 ReactJS**

React components implement a `render()` method that takes input data and returns what to display. This example uses an XML-like syntax called JSX. Input data that is passed into the component can be accessed by `render()` via `this.props`.

**JSX is optional and not required to use React.** Try the [Babel REPL](#) to see the raw JavaScript code produced by the JSX compilation step.

#### **3.1.3 Bootstrap4**

- Bootstrap is a free front-end framework for faster and easier web development
- Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins
- Bootstrap also gives you the ability to easily create responsive design.
- 

#### **3.1.4 Javascript**

**JavaScript** is a lightweight, interpreted **programming** language. It is designed for creating network-centric applications. It is complimentary to and integrated with Java. **JavaScript** is very easy to implement because it is integrated with HTML. It is open and cross-platform.

## 3.2 TOOLS AND LANGUAGES

Tools used to build the Android App are:-

- **Visual Studio:** Visual Studio is an environment that help us create and edit web applications. It is the official IDE for Web Development. It supports all types of programming languages.
- **HTML:** HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content.

## CHAPTER -4

### IMPLEMENTATION AND USER INTERFACE

Creating a website concept design with screen sketches and functional flow diagrams is the best way to communicate your vision to the mobile app developer. Making the concept clear to the developer is probably the most important factor in successful web app development. Yet it is one of the most common problems or obstacles in a web development outsourcing project.

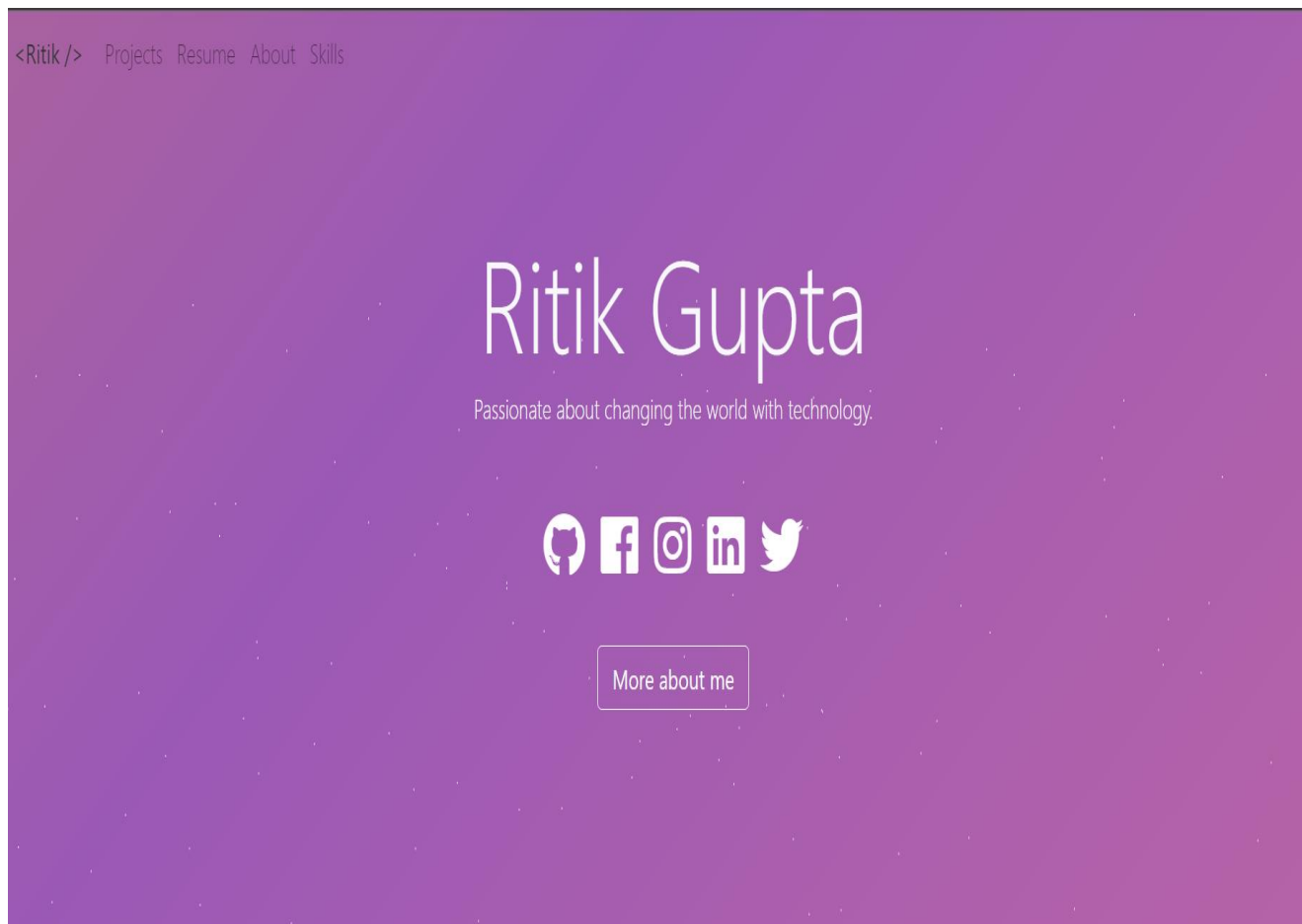
No matter what the marketing and profit goals are or if you are outsourcing an app for your personal use, you need to fully design and document the app concept if you expect a programmer to make your vision a reality. Developers are not mind readers and even descriptions given during conversations can be very fleeting or interpreted differently. Fully documenting your concept, therefore, leaves little to chance. The two most important things to do are: A) make a comprehensive description of how the app works and what it does (functionality) and B) create a comprehensive description of what the user sees and does (look and feel).

## 4.1 Implementation of the MODEL PORTFOLIO TEMPLATE:

Implementation of portfolio template is taken place in various phases. Firstly we build the home interface then Navigation drawer i.e. make fragment for each of the list item using the Navigation view and the make various layout for the supporting features and connect the app with the GitHub API for fetch the required project. And finally we parse the Js object to get the data in the required format and then display the result.

## 4.2 User Interface

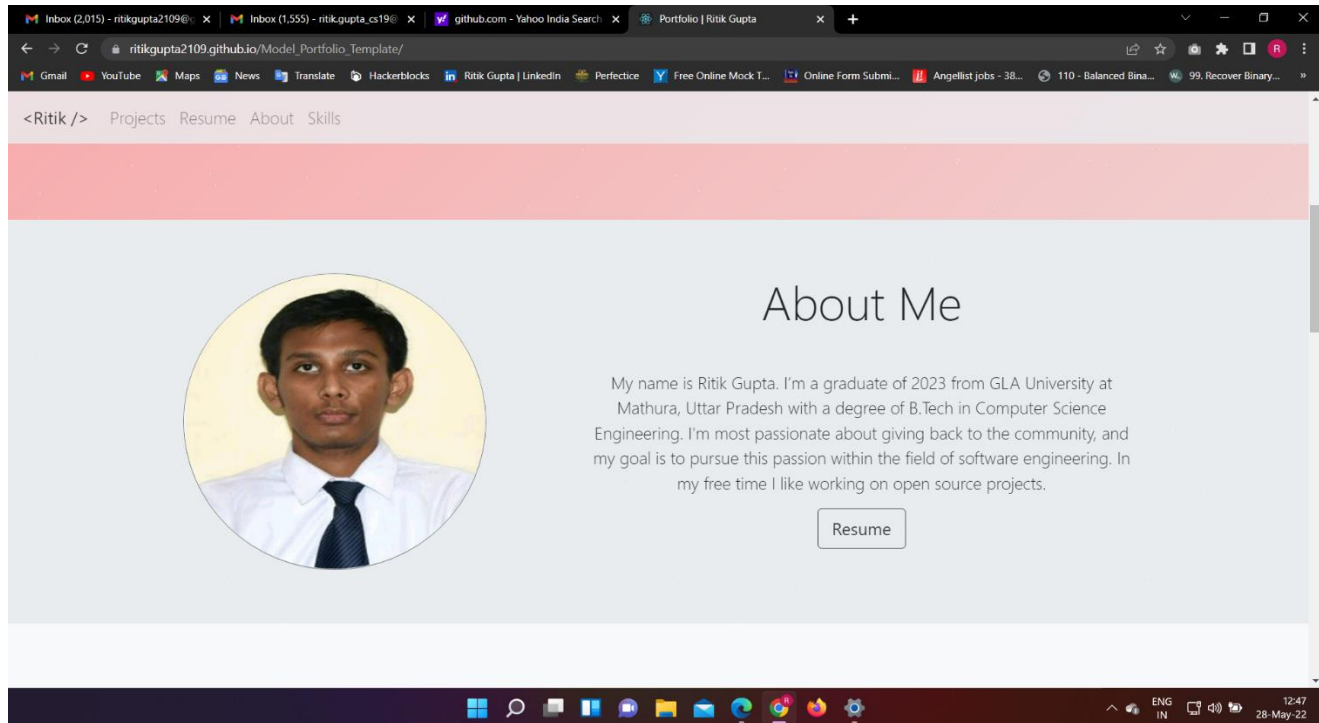
- **Home section**



**Figure-2: Home Screen**

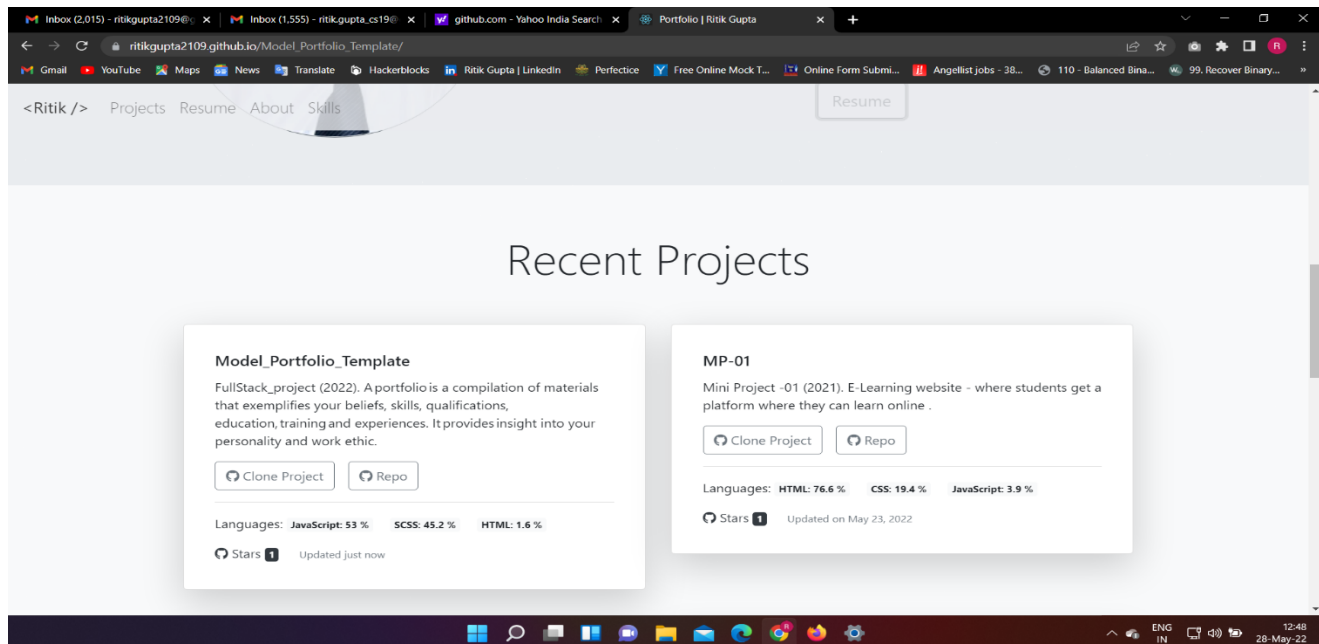


- **About Section**



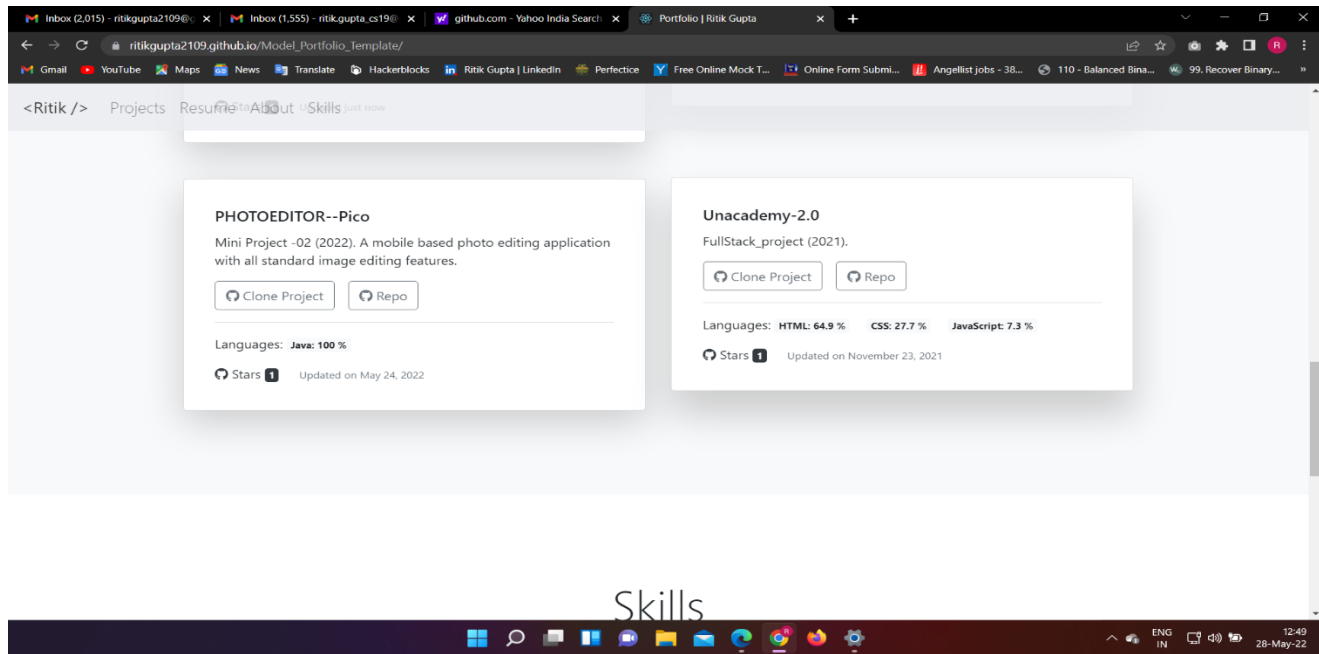
**Figure-3: About Section**

- **Project (a)**



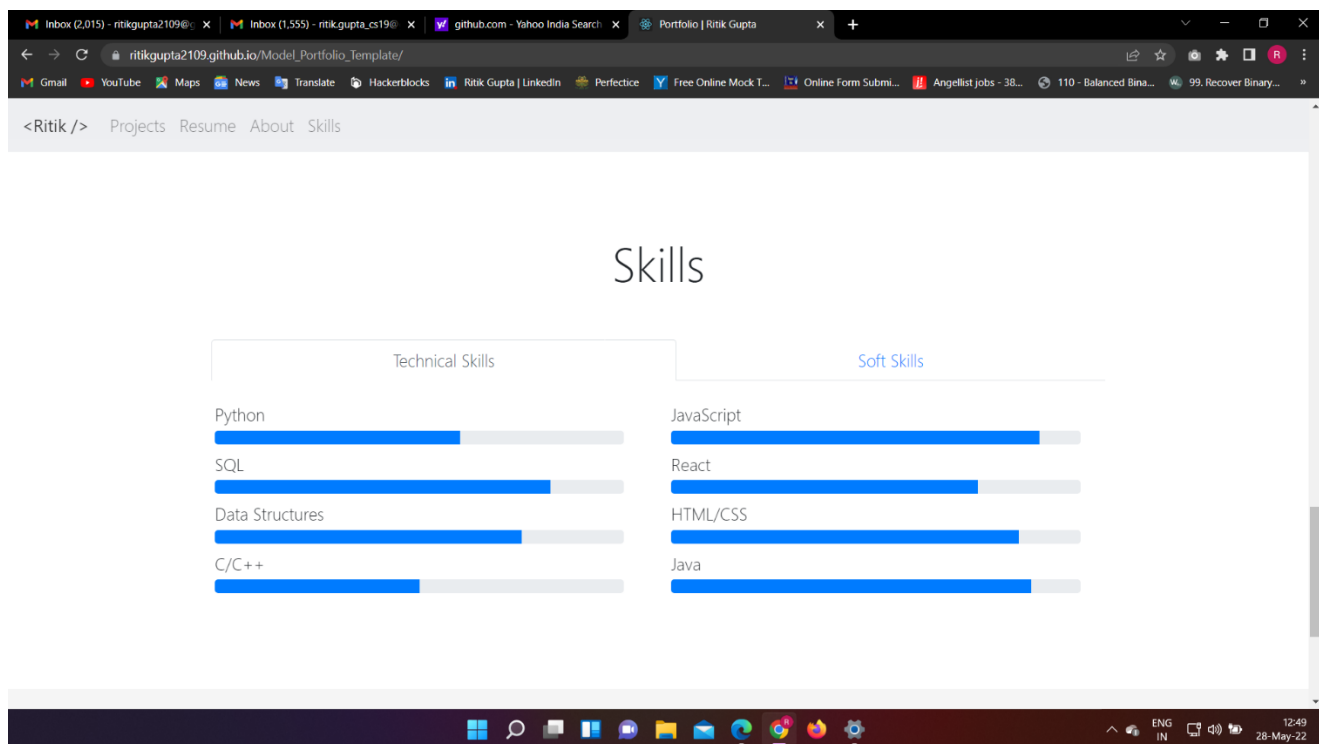
**Figure-4: Project (a)**

- **Project (b)**



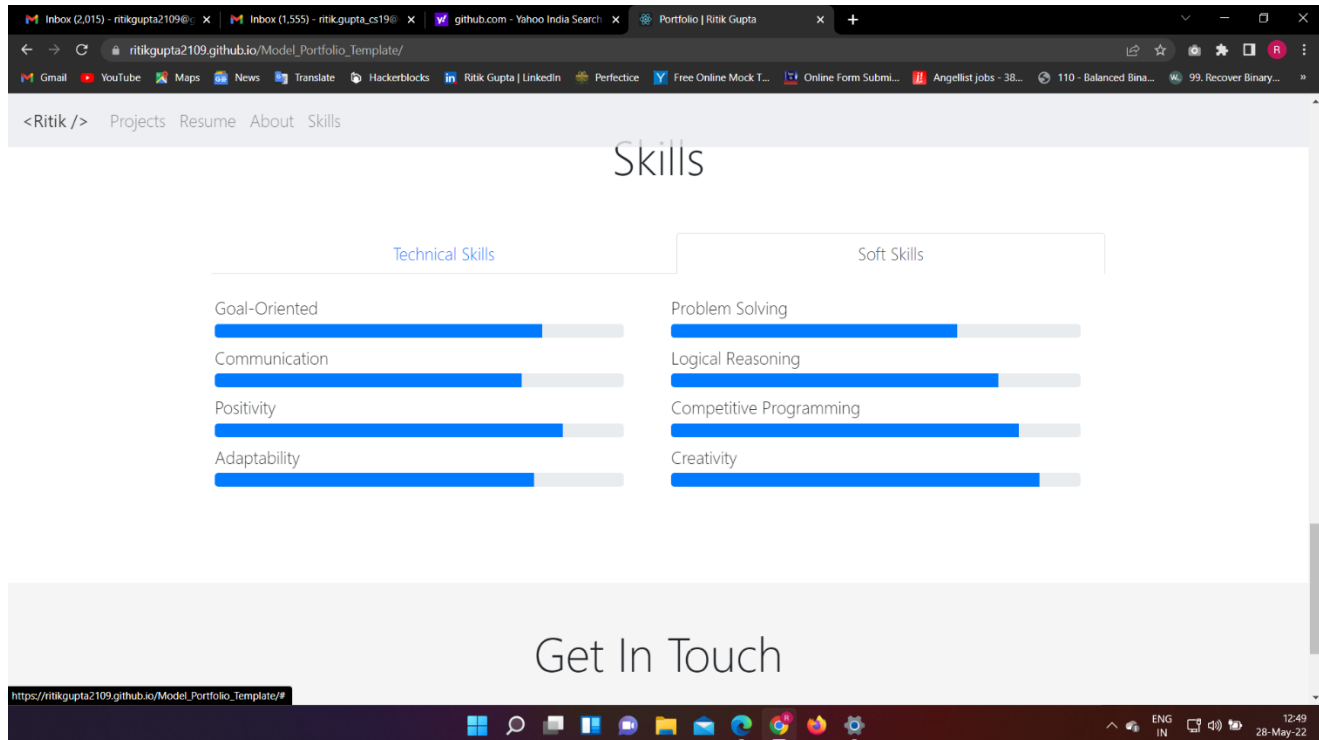
**Figure-5: Project (b)**

- **Technical Skills**



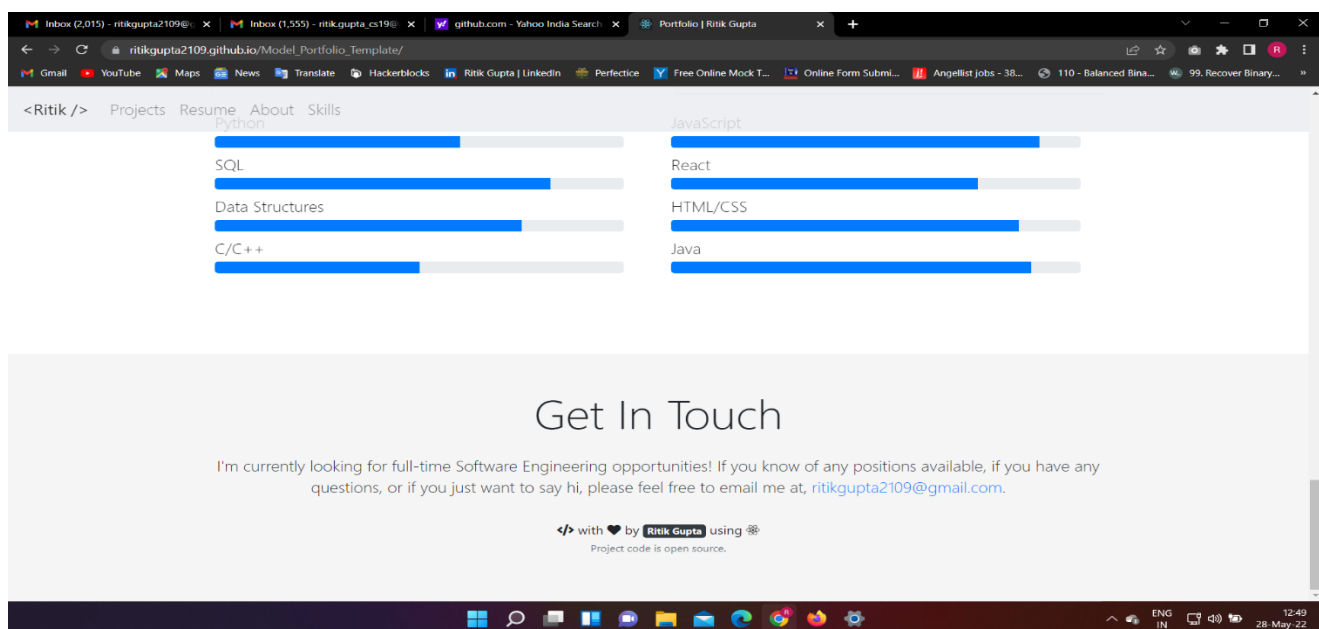
**Figure-6: Technical Skills**

- **Soft skills**



**Figure-7: Soft skills**

- **Get in touch section**



**Figure-8 : Get in touch section**

# **CHAPTER - 5**

## **TESTING**

Once source code has been generated, software must be tested to uncover as many errors as possible before delivery. It is very important to work the system successfully and achieve high quality of software. Testing include designing a series of test cases that have a high likelihood of finding errors by applying software-testing techniques.

System testing makes logical assumptions that if all the parts of the system are correct, the goal will be successfully achieved. The system should be checked logically. Validations and cross checks should be there. Avoid duplications of record that cause redundancy of data.

In other Words, Testing is the process of evaluating a system or its component(s) with the intent to find whether it satisfies the specified requirements or not. It is executing a system in order to identify any gaps, errors, or missing requirements in contrary to the actual requirements.

The web framework includes an integrated testing framework that helps you test all aspects of your application and the vs code tools include tools for setting up and running test applications. Whether you are working in Eclipse with ADT or working from the command line, the help you set up and run your tests within an online site or the device you are targeting.

There are different types of testing some of them are listed below:

### **5.1 Installation Testing:**

For both of the above, live testing is carried out by me. It is ensuring smooth on server side of the without ending up in errors etc.

### **5.2 Unit Testing**

It focuses on smallest unit of website design. In this we test an individual unit or groups of inter related units. It is often done by programmer by using sample input and observing its corresponding outputs. In this testing technique we are primarily focuses on

- Loop methods and function is working fine or not. □ Misunderstood or incorrect Arithmetic precedence

**Unit Testing of the website:**

Test cases	Description	Expected Outcome	Result
1	Start Page – Home section	Should display home page with a task bar showing navigation option like username, projects, resume, about, skills, get in touch sections. Some social links are also working .	Pass
2	About Section	Should display short description and resume button working properly.	Pass

3	Project (a)	Should display two projects through GitHub pages.	Pass
4	Project(b)	Should display another two projects through GitHub pages.	Pass

5	Technical Skills	Should display technical skills.	Pass
6	Soft skills	Should display soft skills.	Pass
7	Get in touch section	Should display the email id , if anybody have problem he/she can mail me.	Pass

**Table 1: Unit Testing of Bookopedia**

### **5.3 User Testing**

User testing is the process through which the interface and functions of a website, app, product, or service are tested by real users who perform specific tasks in realistic conditions. The purpose of this process is to evaluate the usability of that website or app and to decide whether the product is ready to be launched for real users.

This app was tested by me who to check its performance and it seems to be working fine and users of this app are satisfied with the facilities and performance of the website and like the way how it is working.

### **5.4 Performance Testing**

In this type of testing we have checked the performances of our application under some peculiar conditions are checked. Those conditions include:

- Low memory in the device.
- The battery in extremely at a low level.
- Poor/Bad network reception.

Performance is basically tested from 2 ends, application end, and the application server end. Our app is also performing well in this phase of testing as well. And we are getting positive feedback from user of our app.

### **5.5 Compability Testing**

This website was tested and used on different devices like LG G3, Google Nexus 4. The site worked fine and is stable. The application worked fine in portrait mode and there isn't any problem with compatibility.

On all types of testing (that we have performed above) our performing well on our website i.e. Model Portfolio Template.



## **CHAPTER -6**

### **CONCLUSION**

Proposed Model Portfolio template is a web application that will allow users to search for or edit user name, projects, about me description, skills etc. This application takes in a user input and searches the GitHub API with the user input and gets a list of published projects based on the users search query. Search result screen will contain a list of recent projects with following details: name of project, title, average, rating of the project. To get the information of the particular project full support to user can click upon the repo from the list and then will be taken to the new tab where description and other information related to the projects will be available. Users can also add the star to the favourites.

This application has wide range of scope in the upcoming era. It is impossible to arrange the hard copies of every portfolio so this type of application can reduce the barrier to get knowledge at any place in a cost effective, productive way. For students who are interested in applying for jobs can use this application and keep all the records and achievements they want to store from at one place (in favourites section) and can create their own personal portfolio with resume.

## REFERENCES

1. Internshala: <https://trainings.internshala.com/>

2. For rectifying the error :

<https://stackoverflow.com/>

3. <https://www.w3schools.com/>

4. <https://shapemyskills.in/>