

# **WAPH - Web Application Programming and Hacking**

**Instructor: Dr. Phu Phung**

**Student**

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**Profile Pic**

## **Repository information for Project 1**

### **Repository**

*Repository URL:* <https://github.com/barupasa/barupasa.github.io>.

## **INDIVIDUAL PROJECT 1 : PERSONAL WEBSITE**

### **Overview**

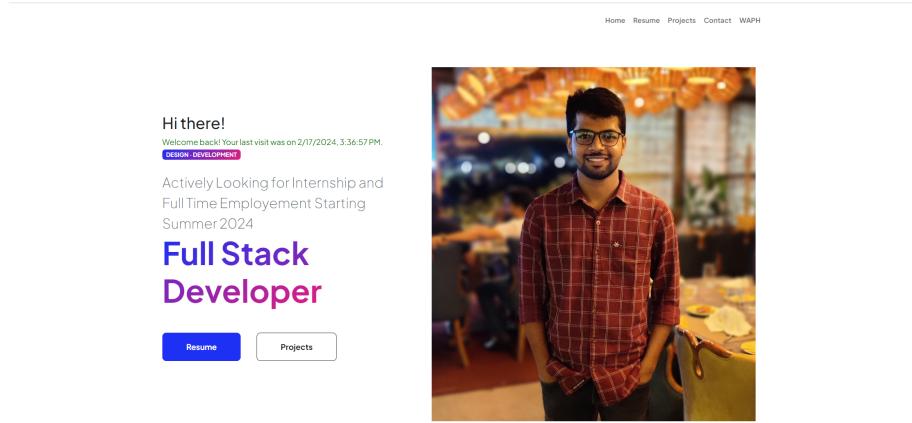
In the project 1 ,I have developed a personal portfolio which has all my details such as Name ,profile pic ,experience ,education ,resume and skills .The portfolio is linked with a waph.html page to showcase all my work which i learnt in WAPH course. The portfolio is integrated with analog ,digital clock ,show your email.The portfolio is also integrated with two public API's Joke and weather . Javascript Cookies is introduced to remember the user and a random greeting message is also displayed when the portfolio is opened .

Techstack used : HTML,CSS,JQuery,Java script ,React and Bootstarp. \*\*\*

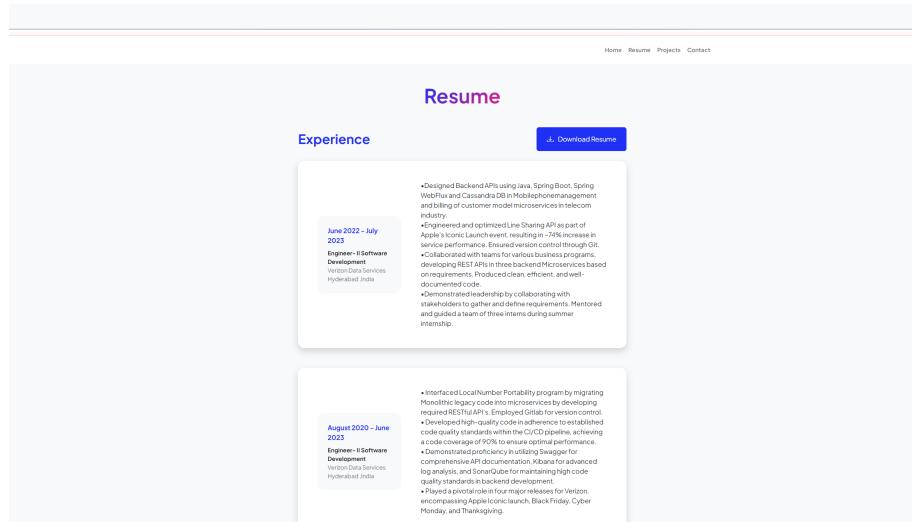
## Task 1 : General requirements (30 pts)

### Create and deploy Personal website

I have built personal portfolio by using a predefined bootstrap template which I got at startbootstrap.com .I have updated all my details in the portfolio as mentioned in the requirements such as Name ,profile pic ,experience ,education ,resume and skills .



The screenshot shows a personal website with a header navigation bar containing Home, Resume, Projects, Contact, and WAPH. Below the header is a large profile photo of a man with glasses and a red plaid shirt. To the left of the photo, there is a greeting message and a welcome back note indicating the last visit was on 2/17/2024, 3:36:57 PM. A 'DESIGN DEVELOPMENT' badge is present. Below the photo, a section titled 'Full Stack Developer' is displayed, along with 'Resume' and 'Projects' buttons.

The screenshot shows the 'Resume' section of the website. It features a title 'Resume' and a 'Download Resume' button. The page lists two work experiences:

- June 2022 - July 2023**  
Engage IT Software  
Project Management  
Vernon Data Services  
Hyderabad, India  
• Designed Backend APIs using Java, Spring Boot, Spring WebFlux, and Docker. Developed E2E automation tests for payment and billing of customer model microservices in telecom industry.  
• Engineered and optimized Line Charging API as part of Apple's iconic Launch event, resulting in ~70% increase in service performance. Ensured version control through Git.  
• Collaborated with teams for various business programs, developed and maintained documentation for each based on requirements. Produced clean, efficient, and well-documented code.  
• Developed and maintained API documentation by collaborating with stakeholders to gather and define requirements. Mentored and guided a team of three interns during summer internships.
- August 2020 - June 2023**  
Engage IT Software  
Project Management  
Vernon Data Services  
Hyderabad, India  
• Integrated Local Number Portability program by migrating Monolithic legacy code into microservices by developing required RESTful APIs. Employed GitLab for version control.  
• Developed high-quality code in adherence to established coding standards and best practices, achieving a code coverage of 90% to ensure optimal performance.  
• Demonstrated proficiency in utilizing Swagger for documenting APIs and using OpenAPI for automated log analysis and SonarQube for maintaining high code quality standards in backend development.  
• Played a key role in our major releases for Holi, encompassing Apple iPhone launch, Black Friday, Cyber Monday, and Thanksgiving.

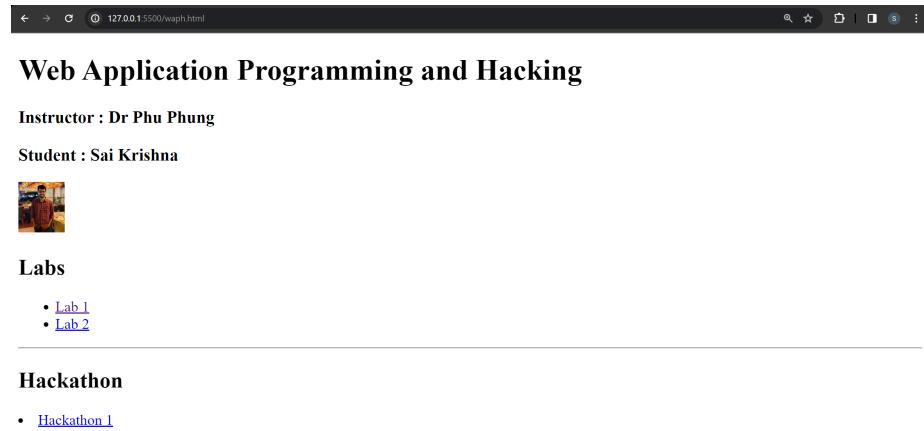
This screenshot shows a resume page with a light gray header containing the URL '127.0.0.1:5500/resume.html'. Below the header, there's a section for 'University Of' with a placeholder 'Placeholder'. Underneath this, there's a box for 'Education' listing 'August 2016 - August 2020' at 'CVR College of Engineering, Hyderabad, India' (Bachelor's in Information Technology). To the right of the education box is a list of 'Relevant course work' including 'Object Oriented Programming Java', 'Cloud Computing', 'Database Management System SQL', 'Web Development', 'Operating Systems', and 'Cloud Computing'. Below the education box is a section titled 'Professional Skills' with categories 'Software Development' and 'System Design'. Under 'Technical Skills', there are boxes for 'HTML', 'CSS', 'JavaScript', 'Java', 'SQL', and 'Microservices'.

This screenshot shows a projects section of a website. At the top, there's a purple header with the word 'Projects'. Below it, there are two cards: one for a 'Full stack Application' (Ecommerce site) and another for a 'Mobile Application' (Event Management).

This screenshot shows the 'About Me' section of the website. It features a purple header with 'About Me'. Below it, there's a bio: 'I'm actively looking for Internship/Full Time starting Summer 2024. I have 3 years of work experience as Software Developer at Verizon Data Services.' There are social media links for Twitter, LinkedIn, and GitHub. Further down, there's a 'Display my Email' link, a clock icon, and a note about the current time: 'The current Time is: Sat Feb 17 2024 16:36:45 GMT-0500 (Eastern Standard Time)'. A programming joke is also present: 'Programming joke of the day: "Honey, go to the store and buy some eggs." "OK." "Oh and while you're there, get some milk." He never returned.' At the bottom, there's a weather forecast for Ohio with temperatures from 23°F to 38°F for Saturday through Friday.

## **Link to “Web Application Programming and Hacking” course**

I have updated the portfolio with a new page to showcase my work done as part of WAPH course.



The screenshot shows a web browser window with the URL '127.0.0.1:5500/waph.html'. The page title is 'Web Application Programming and Hacking'. Below the title, it says 'Instructor : Dr Phu Phung' and 'Student : Sai Krishna' with a small profile picture. There is a section titled 'Labs' with links to 'Lab 1' and 'Lab 2'. Another section titled 'Hackathon' has a link to 'Hackathon 1'.

Figure 1: WAPH page

## **Integrated Google Analytics Page tracker**

```
<!-- Google tag (gtag.js) -->
<script async src="https://www.googletagmanager.com/gtag/js?id=G-Q84ZVQPSLS"></script>
<script>
  window.dataLayer = window.dataLayer || [];
  function gtag(){dataLayer.push(arguments);}
  gtag('js', new Date());

  gtag('config', 'G-Q84ZVQPSLS');
</script>
```

### **TASK 2: Technical requirements**

#### **integrated functionalities learnt in Lab2**

I have included a digital clock, analog clock, show/hide your email from lab2 and other functionality I have added greetings message in the portfolio to make it more interesting. For greetings I have added few messages and wrote the script such that it will display a random greeting every time when the portfolio is used. attached snapshots for the same .

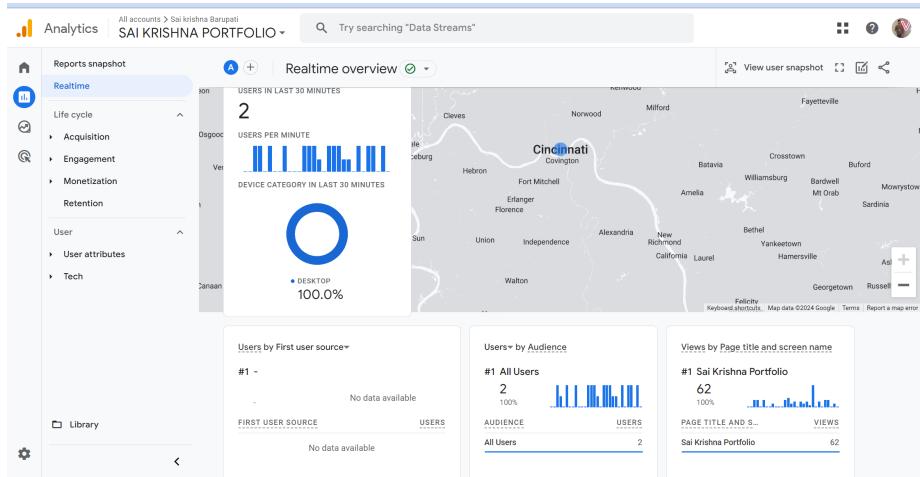


Figure 2: Google Analytics Tracker Results

```

<div id="email" style="color:blue;" onclick="showOrHideEmail()">Display my Email</div>
<script type="text/javascript" src="js/email.js"></script>
<div id="digital-clock" style="color:blue;"></div>

<canvas id="analog-clock" width="150" height="150" style="background-color:#fff; border:1px solid #ccc; position: absolute; left: 50%; top: 50%; transform: translate(-50%, -50%);>
```

```

<!-- Analog clock script -->
<script src="https://waph-uc.github.io/clock.js"></script>
<script type="text/javascript">
var canvas=document.getElementById("analog-clock");
var ctx=canvas.getContext("2d");
var radius=canvas.height/2 ;
ctx.translate(radius,radius);
radius=radius * 0.90 ;
setInterval(drawClock,1000);
function drawClock(){
drawFace(ctx,radius);
drawNumbers(ctx,radius);
drawTime(ctx,radius);
}
</script>
```

```

<!-- Digital clock script -->
<script type="text/javascript">
function displayTime() {
document.getElementById('digital-clock').innerHTML=" The current Time is "+new Date().toLocaleString();
}
</script>
```

```

        setInterval(displayTime,500);

    </script>

    var isVisible = false;
    function showOrHideEmail() {
        if (isVisible) {
            document.getElementById('email').innerHTML = " Show my Email"; visible = false;
        }
        else {
            var myEmail = "<a href='mailto:barupasa" + "@" + "mail.uc.edu'>barupasa" + "@" +
                document.getElementById('email').innerHTML = myEmail; visible = true;
        }
    }
}

```

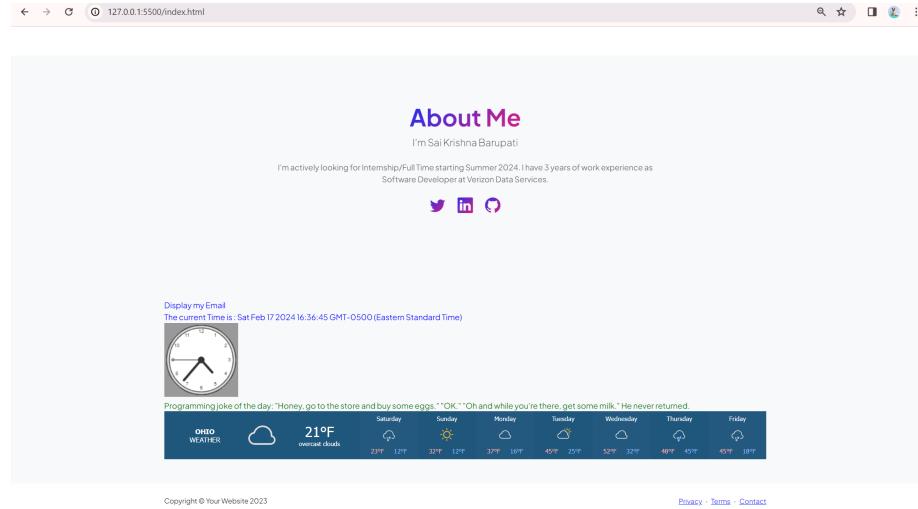


Figure 3: Digital,Analog ,show or hide email

## Joke API

I have integrated joke API which i learnt in lab2.

```

<div id="joke" style="color:green;"></div>

<!-- Joke API script -->
<script src="https://code.jquery.com/jquery-3.7.1.min.js"
       integrity="sha256-/JqT3SQfawRcv/BIHPThkBvs0EvtFFmqPF/lYI/Cxo=" crossorigin>
<script>
    $.get("https://v2.jokeapi.dev/joke/Programming?type=single",

```

```

        function (result) {
            console.log("from joke API: " + JSON.stringify(result));
            $("#joke").html("Programming joke of the day: " + result.joke);
        });
    </script>

```

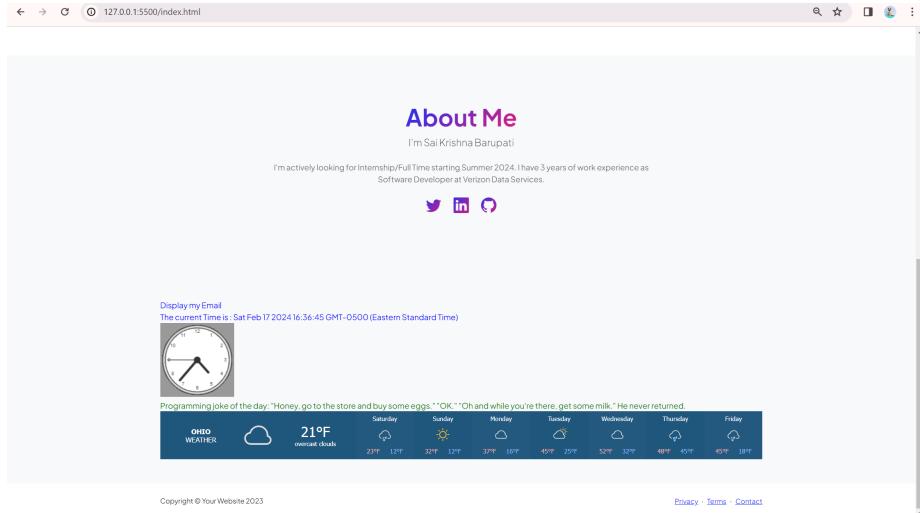


Figure 4: Random Joke

## Public API with graphics

I have integrated a public API which has graphics .

```

<!-- Weather widget script -->
<a class="weatherwidget-io" href="https://forecast7.com/en/40d42n82d91/ohio"
   data-label_2="WEATHER" data-theme="original">OHIO WEATHER</a>
<script>
  !function (d, s, id) { var js, fjs = d.getElementsByTagName(s)[0]; if (
</script>

```

## Greeting Message

To make the portfolio better, I have added greeting message using react which is a JS library ,In which I have added few greeting messages and wrote the script such that it will display a random greeting every time when the portfolio is used.

```

const Greeting = () => {
  const greetings = [
    'Hello!',
    'Hi there!',
  ]

```

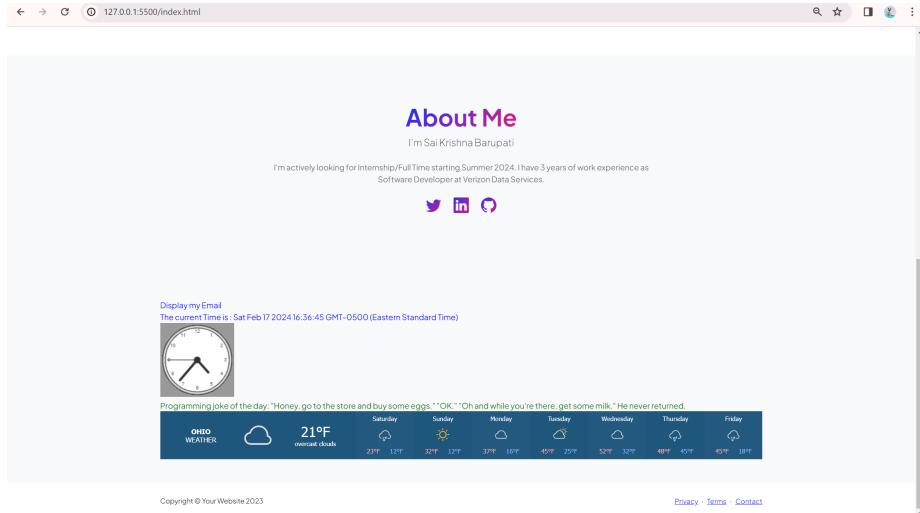


Figure 5: weather widget

```
'Welcome!',  
'Greetings!',  
'Nice to see you!',  
];  
  
const randomIndex = Math.floor(Math.random() * greetings.length);  
const randomGreeting = greetings[randomIndex];  
  
return React.createElement('h2', null, randomGreeting);  
};  
  
ReactDOM.render(React.createElement(Greeting, null), document.getElementById('greeting'));
```

## Cookie

I have integrated portfolio with Javascript cookies to remember the user .I gave customized message based on the cookie .below is the code i have utilized .

```
<!-- Cookie script -->  
<script>  
    function setCookie(name, value, expiryDays) {  
        const expirationDate = new Date();  
        expirationDate.setDate(expirationDate.getDate() + expiryDays);  
        document.cookie = `${name}=${value};expires=${expirationDate.toUTCString()}`  
    }  
</script>
```

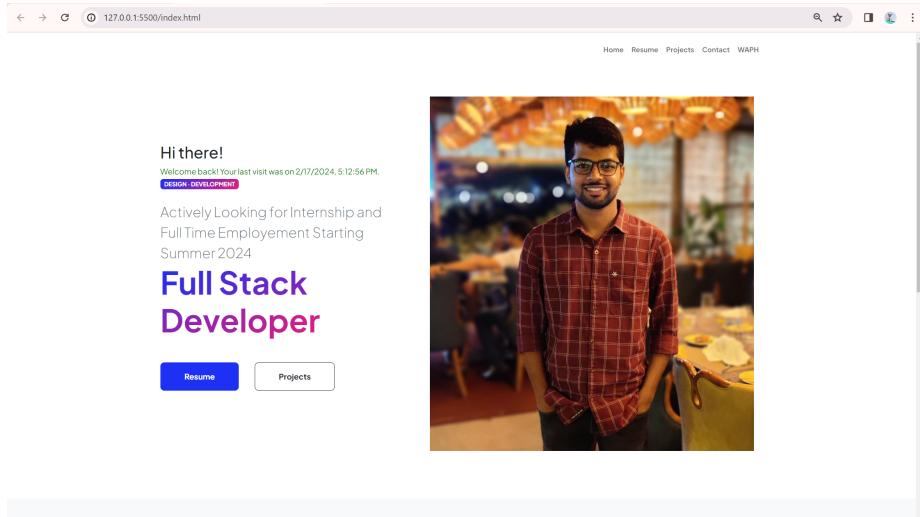


Figure 6: Random greeting message

```

function getCookie(name) {
    const cookieValue = document.cookie.split('; ')
        .find(cookie => cookie.startsWith(name + '='))
        ?.split('=')[1];
    return cookieValue ? decodeURIComponent(cookieValue) : '';
}

function welcomeUser() {
    const lastVisit = getCookie('lastVisit');
    const greetingElement = document.getElementById("welcomecookie");

    if (lastVisit) {
        greetingElement.innerHTML = `Welcome back! Your last visit was on ${lastVisit}`;
    } else {
        greetingElement.innerHTML = 'Welcome to Sai Krishna portfolio!';
    }

    setCookie('lastVisit', new Date().toLocaleString(), 365);
}

welcomeUser();

</script>

```

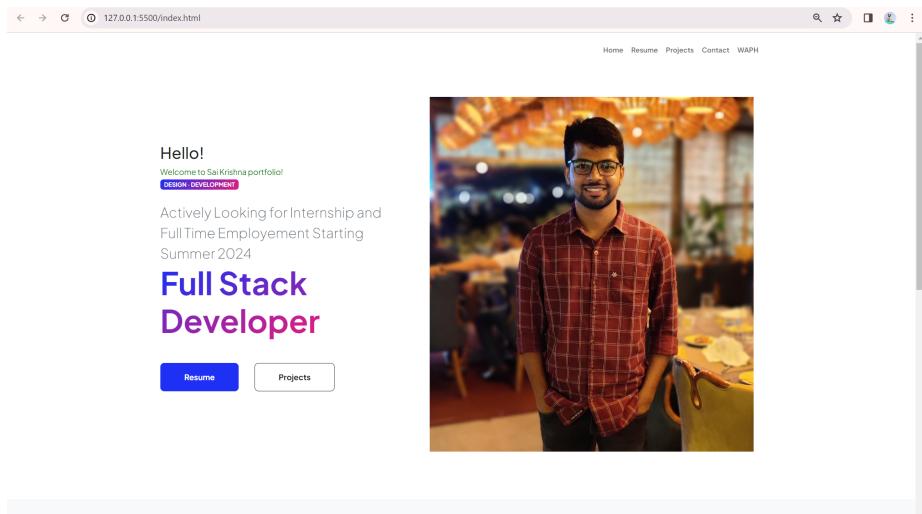


Figure 7: First time user

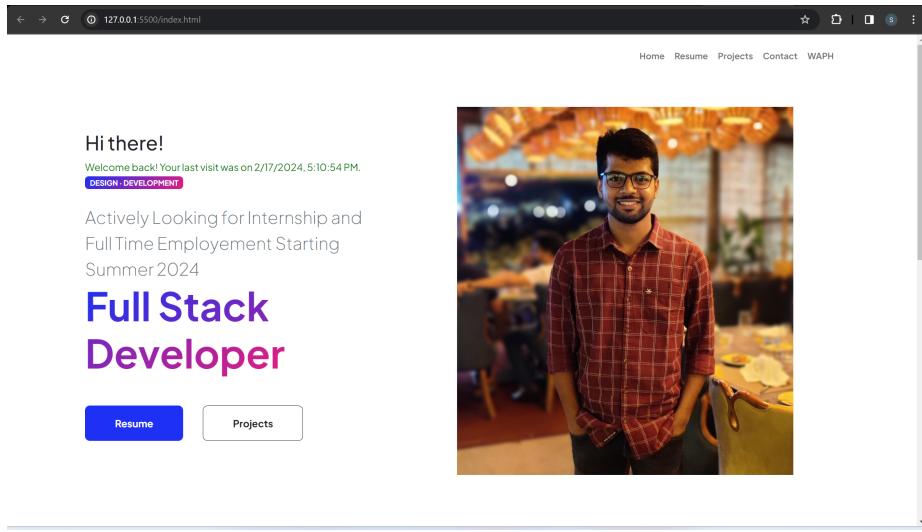


Figure 8: Revisted user