Web Application Programming and Hacking

Instructor: Dr. Phu Phung

Individual Project 1 – Professional Profile Website with API Integration

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Links

• **Deployed Website:** https://pratysri.github.io

• GitHub Repository: https://github.com/pratysri/pratysri.github.io

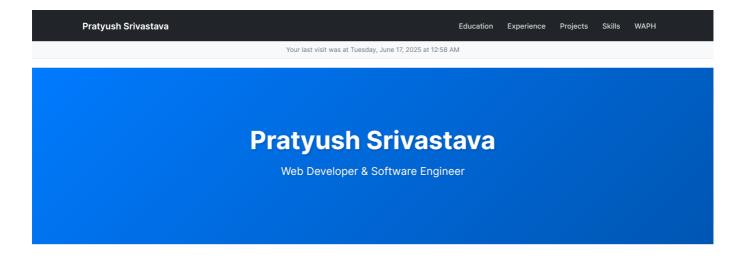
Overview

In this project, I created a personal professional profile website deployed on GitHub Pages. The site includes my resume, education, experience, skills, and interactive JavaScript components such as clocks and live APIs. I also integrated two public APIs and added localStorage-based tracking for first-time and returning visitors.

Through this assignment, I strengthened my understanding of front-end development, AJAX-based web services, JavaScript state handling, and GitHub-based deployment.

1. General Requirements

Personal Profile Website (25 pts)



About Me

Screenshot: Main profile page with navigation and sections

- Used custom Bootstrap-based theme with modern design
- Included my name, photo (150x150), contact info, education, experience, and skills
- Resume provided as downloadable PDF (resume.pdf)

WAPH Course Page (5 pts)

Pratyush Srivastava Home WAPH

Web Application Programming and Hacking (WAPH)

Course Overview

WAPH is a hands-on course that explores both the development and security aspects of web applications.

Course Details

- · Instructor: Dr. Phu Phung
- . Focus Areas: Front-end and back-end web technologies, cybersecurity concepts
- Key Topics: XSS, SQL injection, secure coding practices

Learning Experience

The course combines theoretical knowledge with practical experience through:

- Hands-on labs
- Hackathons
- · Real-world projects
- · Website development
- · Network traffic analysis
- · Vulnerability assessment

Course Benefits

WAPH is ideal for students interested in:

- · Web development
- · Ethical hacking
- Cybersecurity

Course Labs

Lab 2

Introduction to HTML, CSS, and JavaScript

Web Development Basics

Screenshot: WAPH course page with lab summaries

- Created waph.html with a summary of WAPH class, labs, and learning takeaways
- Linked this page from the main navigation

2. Non-Technical Requirements (20 pts)

CSS Template



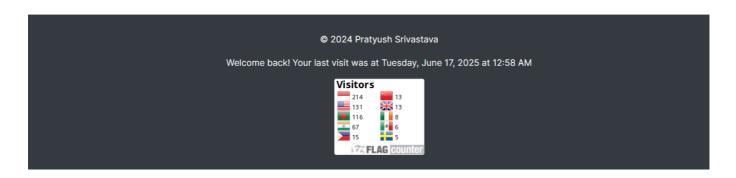
About Me



Screenshot: Website on mobile device

- Used Bootstrap via CDN for styling
- Applied a clean, mobile-friendly layout with custom color scheme
- Implemented smooth scrolling and fade-in animations

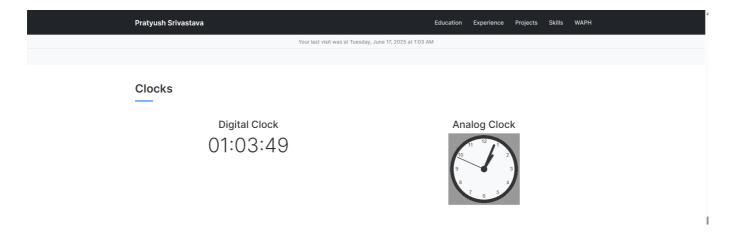
Page Tracker



Screenshot: Flag counter widget

- Embedded Flag Counter to count visitors
- 3. Technical Requirements (50 pts)

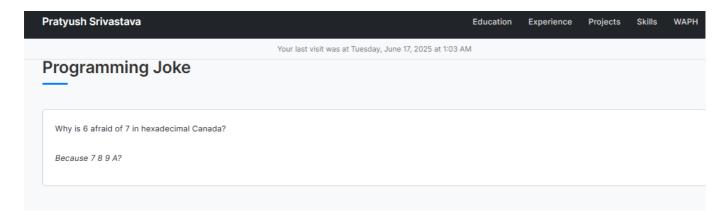
JavaScript Features (20 pts)



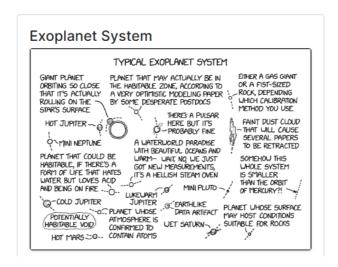
Screenshot: Digital and analog clocks

- **Digital Clock:** Added using **setInterval()** to update current time
- Analog Clock: Built with Canvas and JavaScript drawing functions
- Dark Mode Toggle: Implemented theme switching with localStorage persistence
- Last Visit Tracking: Shows last visit time using localStorage

API Integration (20 pts)



XKCD Comic

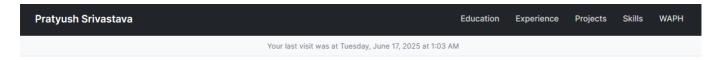


Screenshot: Joke API and XKCD comic sections

• **Joke API:** Used https://v2.jokeapi.dev/joke/Programming?safe-mode to fetch programming jokes

- XKCD Comic: Fetched and displayed latest XKCD comic using https://xkcd.vercel.app/?comic=latest
- Disclaimer: Displayed under both API sections to indicate third-party content

Visit Tracking (10 pts)



Screenshot: Last visit display

- Shows last visit time at the top of the page
- Uses localStorage to persist visit information
- Updates automatically on each page load

Final Thoughts

This project helped me integrate multiple frontend concepts including dynamic JavaScript behavior, public web APIs, and persistent browser state. It was also a valuable experience in deploying a site publicly using GitHub Pages, making it suitable for real-world professional use.