GOVERNMENT ENGINEERING COLLEGE , SAMASTIPUR



INTERNSHIP REPORT ON FRONTEND WEB DEVELPMENT

SUBMITTED BY:-
NAME :- ABHISHEK KUMAR SINGH
BRANCH:- CSE(AIML)
REG. NO.:- 24157159047
ROLL NO.:- S24AIML02
SESSION:- 2024-2028

Signature:
Internal Examiner

Signature:
External Examiner

Certificate

SL. No: **SD/25/746**

SkillDarpan
A unit of Diptech Technologies Pvt. Ltd.

Date: **02/01/2026**

Certificate of Internship Completion

CERTIFIED ISO 9001:2015 COMPANY

This is to certify that

Scan to verify

ABHISHEK KUMAR SINGH

Reg. No. **24157159047**

from **Government engineering College, samastipur**

Studying In **Cse(AIML)**

has successfully completed the internship program in the field of

FRONTEND WEB DEVELOPMENT

conducted by, Diptech Technologies Private Limited from

December 22, 2025 to January 02, 2026

During this period, the intern actively participated in the assigned tasks and training sessions and has shown commendable enthusiasm and professionalism throughout the internship.

Training Mode: **Offline**

Attendance: **89%**

Performance Score: **94%**

We appreciate the dedication and commitment demonstrated by the intern during the internship tenure.

We wish [him/her/them] success in all future endeavors.

Supriya Prabhat
Instructor Signature

Dayanand Kumar Mehta
Director

AICTE INTERNSHIP APPROVED

Org. Ref. Id:
CORPORATE65ae5c46cb22e1705925702

SL. No: **SD/25/747**

SkillDarpan
A unit of Diptech Technologies Pvt. Ltd.

Date: **16/01/2026**

Certificate of Internship Completion

CERTIFIED ISO 9001:2015 COMPANY

This is to certify that

Scan to verify

ABHISHEK KUMAR SINGH

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has successfully completed the internship program in the field of

FRONTEND WEB DEVELOPMENT

conducted by, Diptech Technologies Private Limited from

January 03, 2026 to January 16, 2026

During this period, the intern actively participated in the assigned tasks and training sessions and has shown commendable enthusiasm and professionalism throughout the internship.

Training Mode: **Online**

Attendance: **93%**

Performance Score: **88%**

We appreciate the dedication and commitment demonstrated by the intern during the internship tenure.

We wish [him/her/them] success in all future endeavors.

Supriya Prabhat
Instructor Signature

Dayanand Kumar Mehta
Director

AICTE INTERNSHIP APPROVED

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Acknowledgement

This report is a detailed account of my 4-week Web Development Internship conducted at Skill Darpan. The program was designed to deliver a hands-on experience in building modern websites using industry-standard technologies.

The internship covered frontend development topics in four structured weeks:

- HTML and Semantic Web Elements
- CSS styling and layout techniques
- JavaScript for interactivity and logic building
- A capstone project involving responsive website development

By the end of the internship, I had created a responsive multi-page personal portfolio website using all the concepts learned. This report documents weekly progress, tools used, challenges faced, and key takeaways.

Abstract

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Introduction

Web development is the foundation of modern internet services, encompassing the creation of websites and web applications. This internship focused on frontend development — the part of web development that deals with how websites look and interact with users.

The program was tailored for beginners and intermediate learners who want to build practical knowledge of how web pages are structured, styled, and made interactive. The training emphasized writing clean and semantic code, creating user-friendly layouts, and building responsive, mobile-ready websites.

Each week was dedicated to specific concepts and technologies, followed by mini-projects or assignments that reinforced learning through practice.

Tools and Technologies Used

The internship incorporated various development tools and frameworks essential for a frontend web developer:

Languages:

- HTML5: For content structuring
- CSS3: For styling and layout design
- JavaScript (ES6): For behavior and interactivity

IDEs and Tools:

- Visual Studio Code: Main code editor
- Live Server: Browser preview of projects
- Git & GitHub: Version control and portfolio hosting
- Chrome DevTools: Debugging and responsiveness testing
- Figma (View Only): UI layout reference

Libraries/Utilities:

- Google Fonts, Font Awesome Icons
- CSS Flexbox and Grid
- Media Queries for responsiveness
- DOM methods like querySelector, addEventListener, innerHTML

All tools were open-source and compatible across systems.

Week 1: HTML5 and Semantic Web Structure

The internship began with mastering HTML5 elements used to build the structure of modern web pages. This included:

- Basic tags: headings, paragraphs, links, lists, tables, and images
- Forms: text fields, password fields, checkboxes, radio buttons, textareas, submit/reset buttons
- Semantic tags: <header>, <footer>, <section>, <article>, <aside>, and their benefits in SEO and accessibility
- Page layout planning and wireframing basics
- Creating page skeletons from scratch

Mini Task: Designed a single-page resume using only HTML elements with headings, contact info, work experience, and project listings.

Week 2: Styling with CSS & Responsive Layout

Week 2 introduced the power of CSS in transforming a plain HTML page into an appealing interface. Topics included:

- CSS syntax, selectors, and specificity
- Box model, margins, paddings, borders
- Color schemes and font families using Google Fonts
- Display properties (inline, block, inline-block, none)
- Flexbox for layout control and vertical/horizontal alignment
- Grid layout for advanced 2D structuring
- Media queries for responsiveness (mobile-first approach)

Mini Task: Styled the HTML resume page to make it visually appealing and responsive on different screen sizes using Flexbox and media queries.

Week 3: JavaScript & DOM Manipulation

This week focused on adding interactivity to static pages using JavaScript. Topics covered:

- JavaScript syntax and data types
- Operators, conditionals, and loops
- Functions and arrow functions
- DOM traversal and manipulation (getElementById, querySelector)
- Event handling using onclick, onsubmit, and keyup
- Form validation and alerts

Mini Task: Developed a sign-up form with real-time validation for email, password length, and checkbox selection using JavaScript.

Week 4: Mini Project – Personal Portfolio Website

In the final week, all concepts were consolidated into a personal portfolio project. Features included:

- Home, About, Projects, Contact pages
- Mobile-responsive navigation menu
- Smooth scrolling and section highlights
- JavaScript form validation for the contact form
- External links to GitHub and LinkedIn
- Deployed the project using GitHub Pages
-

Project Outcome: A fully functional and stylish multi-page portfolio that showcases personal information, project samples, and social links — ideal for job and internship applications.

Challenges Faced

Challenges Faced:

- Some technical and creative challenges I encountered:
- Difficulty aligning items in both horizontal and vertical axis
- Page layout breaking on smaller screen sizes
- JavaScript functions not triggering due to wrong DOM selectors
- CSS conflicts due to overlapping class names
- Lack of experience in writing reusable and modular CSS

Solutions Taken:

- Followed Flexbox and Grid visual guides
- Used Chrome DevTools to debug responsiveness
- Rewrote CSS using BEM naming convention for clarity
- Practiced DOM tasks with small interactive snippets
- Took feedback from mentors and batchmates

Key Learnings

- Solid understanding of semantic HTML and accessibility principles
- Efficient use of CSS for layout, styling, and responsive design
- Ability to write vanilla JavaScript for common tasks
- Hands-on experience in debugging and improving UX
- Confidence to build and host personal websites from scratch

Conclusion

This 4-week internship was a complete foundation course in frontend web development. It gave me clarity on how real websites are built from scratch using just HTML, CSS, and JavaScript. I now feel confident to explore more advanced technologies like React.js, Bootstrap, and backend tools.

The knowledge gained here will help me build better projects in college, contribute to open-source, and prepare for industry roles that require frontend development skills.

I sincerely thank Skill Darpan and my faculty for enabling this valuable learning experience.