

Internship in Frontend Development at Dotech Ltd

by

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*Internship report (CSE4099) submitted in partial fulfillment of the
requirements for the degree of*

Bachelor of Science in Computer Science and Engineering

Under the supervision of

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Lecturer



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
UNIVERSITY OF LIBERAL ARTS BANGLADESH**

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DECLARATION

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I declare that this internship report entitled *Internship in Frontend Development at Dotech Ltd* is the result of my own work except as cited in the references. The internship report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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CERTIFICATE

This is to certify that the internship report entitled **Internship in Frontend Development at Dotech Ltd**, submitted by **Imteaz Hossen** (Student ID: 221014017) is a undergraduate student of the **Department of Computer Science and Engineering** has been examined. Upon recommendation by the examination committee, we hereby accord our approval of it as the presented work and submitted report fulfill the requirements for its acceptance in partial fulfillment for the degree of *Bachelor of Science in Computer Science and Engineering*.

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I would like to express my deep and sincere gratitude to my supervisor, , for giving me the opportunity to conduct this internship and providing invaluable guidance throughout this work. His dynamism, vision, sincerity and motivation have deeply inspired me. He has taught me the methodology to carry out the work and to present the works as clearly as possible. It was a great privilege and honor to work and study under his guidance. Also, I would like to thank the other employees of for their help and cooperation during my practice time.

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I am extremely thankful to my parents for their unconditional love, endless prayers and caring, and immense sacrifices for educating and preparing me for the future. I would like to say thanks to my friends and relatives for their kind support and care.

Finally, I would like to thank all the people who have supported me to complete the Internship directly or indirectly.

Imteaz Hossen

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Date: April 21, 2026

Dedicated to
my loving Mother
– *Imteaz Hossen*

EXECUTIVE SUMMARY

The internship at Dotech Ltd helped a lot in gaining practical exposure of IT industry and how actual web applications are designed, developed and maintained which is very useful for me. Dotech Ltd provides exposure to professional environment using modern technologies and modern industry practice. I joined the company as a Frontend Developer Intern with the aim to apply my academic knowledge into real projects and also to enhance my practical skills. In this internship, I was working with the React (Next.js), JavaScript, Tailwind CSS, TanStack Query, Framer Motion, EmailJS and Lucide React. Additionally, I got exposed to Frappe which gave me an understanding of backend interactions and API handling. Building the entire new website of the company was among the significant roles I played in this internship. This provided me a solid experience on how a scalable frontend application should be structured and also on how clean and reusable components could be maintained. Also, I was involved in creating an admin dashboard which exposed me to the ways the systems worked in real world by interacting with senior developers. Throughout the journey there are many problems that I encountered, especially on technologies like Next.js, TanStack Query and Framer Motion. Similarly dealing with API's and dynamic data was also a problem which I later found easy. But with time when I began practice more than before and learned from the seniors I was able to solve those challenges too. This internship vastly enhanced my coding speed, teamwork & UI component development skills. Worked with the team taught me how to be coordinate, adhering to the coding standards and submit task on time line. It's been a wonderful learning experience that will take into the world and feel so confident about building web application in practice.

Keywords (if any): Internship, Dotech Ltd, Frontend Development, React.js, Next.js, Tailwind CSS, JavaScript, TanStack Query, Framer Motion, API Integration, Admin Dashboard, UI/UX Design, Web Application Development, Professional Growth

Contents

1	Introduction	1
1.1	Introduction to the IT and Web Development Industry	1
1.1.1	Importance of Frontend Development in Modern IT Practice .	2
1.2	Internship Context	3
1.3	Objectives of the Internship	3
1.4	Significance of the Internship Experience	4
1.5	Overview of the Report	5
2	Background	6
2.1	Background	6
2.1.1	Overview of Dotech Ltd	6
2.2	Mission, Vision, and Business Orientation	7
2.3	Service Areas and Industry Focus	8
2.4	Organizational Culture and Work Environment	9
2.5	My Role and Purpose as a Frontend Developer Intern	9
2.6	Team Structure and Reporting Relationship	10
3	Internship Activities	11
3.1	Nature of Assigned Responsibilities	11
3.2	Frontend Development of the Company Website	12
3.3	Interactive Features, Animation, and Integration Work	12
3.4	Contribution to the Client Admin Dashboard	13
3.5	Collaboration, Reporting, and Development Communication	14
3.6	Documentation, UAT, and Post, Development Responsibility	14
3.7	Weekly Activities	15
3.8	Challenges Faced	19

3.9	Summary	19
4	Methodology	20
4.1	Overview	20
4.2	Technology Stack	20
4.3	Development Process	20
4.4	Component Design and Responsiveness	21
4.5	Animation and API Integration	21
4.6	Testing, Documentation, and Reporting	22
5	Analysis and Findings	23
5.1	Project Outcomes	23
5.1.1	Personal Portfolio / Company Website	23
5.1.2	Custom Admin Panel (ELF Dashboard)	24
5.2	Learning and Development	24
5.2.1	Technical Learning	24
5.2.2	Professional Learning	25
5.3	Tools and Technologies Used	25
5.3.1	Frontend	25
5.3.2	Libraries and Tools	25
5.3.3	Development Environment and Version Control	26
5.4	User Guidelines	26
5.4.1	Company Website	26
5.4.2	Admin Dashboard	26
5.5	Summary of Findings	27
6	Conclusions and Recommendations	28
6.1	Conclusion	28
6.2	Major Benefits of the Internship	28
6.3	Limitations of the Internship	29
6.4	Recommendations for Dotech Limited	29
6.5	Recommendations for Future Interns	30
6.6	Recommendations for the University and Internship Program	30
6.7	Final Remark	31

7	Conclusions and Recommendations	32
7.1	Conclusion	32
7.2	Major Benefits of the Internship	32
7.3	Limitations of the Internship	33
7.4	Recommendations for Dotech Limited	33
7.5	Recommendations for Future Interns	34
7.6	Recommendations for the University and Internship Program	34
7.7	Final Remark	35
8	Acknowledgments	36
8.1	Internship offer latter	37
	References	38

List of Figures

2.1	Dotech Ltd Logo	7
2.2	Dotech Ltd website	7
3.1	A Section of the Dotech Company Website	16
3.2	About Us Page Section	17
3.3	ELF Admin Dashboard	18
3.4	ELF map	18
8.1	Internship offer latte	37

Chapter 1

Introduction

This chapter provides a foundational overview of the internship report by presenting an introduction to the IT and web development industry and the technical landscape at Dotech Ltd. It is followed by a clear outline of the primary objectives that I pursued during my internship.

1.1 Introduction to the IT and Web Development Industry

Bangladesh's IT industry is becoming an important part of the digital economy of Bangladesh. Over the past 20 years, the growth of ICT has occurred largely due to wider Internet connectivity, the provision of digital public services, private businesses, and an ongoing trend toward using software to do business. Many sources have defined the ICT ecosystem in Bangladesh, which includes customized development of software and applications, the maintenance of applications, IT-enabled services, and e-commerce and web solutions. In practice, the development of websites has been one of the most active and visible sectors within the larger software industry, as it has provided new opportunities for local businesses to transform themselves by utilizing web technologies and for local businesses to enter into international outsourcing markets [Dotech Ltd. \(n.d.-e,-a,-f\)](#).

The expansion has not taken place in a vacuum. Many different institutional entities have contributed to the growth of this industry. One such organization is BASIS, the Bangladesh Association of Software & Information Services; they are the principal representative of the IT & software industry in Bangladesh, with

long-term goals for supporting the growth of the industry. Another example is the Bangladesh Hi-Tech Park Authority, which has promoted the development of rental, job-creating, and technology-based infrastructure via building hi-tech parks, training facilities, and business incubators. The combination of these programmes and initiatives demonstrates the larger efforts of the Government of Bangladesh to create a knowledge-based economy, where software development, digital services, and technology entrepreneurial development will take on a more substantial role in the economy for Bangladesh [International Trade Administration, U.S. Department of Commerce \(n.d.\)](#); [Bangladesh Association of Software and Information Services \(n.d.\)](#).

From an academic and professional view, the web development sector in Bangladesh is important due to many factors. For example, it provides job opportunities for recent college graduates who major in software engineering, design, quality assurance, support services, and project delivery. Additionally, it provides an easy way to enter the global technology market through outsourcing jobs, remote collaboration on projects, and development of digital products. Furthermore, many are moving away from a manufacturing economy toward one focused on services and innovation. Despite its success, the industry faces numerous hurdles including developing more specialized technologies, building better infrastructure, and developing more organizational capacity to successfully scale complex digital products [Dotech Ltd. \(n.d.-e\)](#).

1.1.1 Importance of Frontend Development in Modern IT Practice

Frontend development is a critical area within the tech industry due to its interface with users, the technical platform where all user interactions occur. Regardless of how well, built an app is in terms of back, end functionality, its functionality relies on good interaction between the user and the app. The Front End serves as the 'bridge' between the technology stack and what users need; it is where design, usability, business goals, and software behavior intersect.

It is common for websites to be developed in a manner where they can function correctly regardless of what device is being used to access the site; therefore, developers must create websites that are responsive to all types of users. According to the MDN Web Docs Responsive Design Tutorial, responsive design has become the new standard for creating websites that work on a wide variety of devices and screen

sizes. Beyond responsive design, developers need to consider accessibility when developing websites. The W3C Web Accessibility Initiative provides guidance on how to make a website accessible to people with disabilities. Google has several different performance metrics that can be used to determine site performance, such as visual stability and loading time. All of these factors must be considered when creating a website to provide users with a good experience.

1.2 Internship Context

The Department of Computer Science and Engineering at the University of Liberal Arts Bangladesh (ULAB) requires each student enrolled in CSE4099 to submit an internship report. I completed my internship at Dotech Limited, 3 months / Frontend Developer Intern / 6 Jan to 6 April 2026, 3 months. My internship / experience / - worked in an actual software environment; learned how to plan, discuss, develop, and revise projects based on the organization / clients' requirements.

I chose Dotech Limited because it offered exactly the kind of environment I was looking for at this stage of my academic journey. The company's work culture, its technology stack, and the opportunity to contribute to real development work made it especially appealing. Rather than treating the internship as a short observational placement, I wanted to be in a setting where I could actively sharpen my frontend skills, take responsibility for actual tasks, and understand how software work happens beyond the classroom.

1.3 Objectives of the Internship

The main goal of my internship was to improve my practical skills as a front, end developer. My background in front, end development was already at a reasonable level before joining Dotech Limited; however, I wanted to advance learning by using updated tools, real, world project requirements, and professional expectations. I specifically planned to expand my knowledge of React, based development (primarily Next.js), including ES6 JavaScript features, Tailwind CSS, reusable design for UI components, API integration and animation, and the general process of developing production, ready web applications. [Meta Open Source \(n.d.\)](#); [Vercel \(n.d.\)](#). The second goal is to get to know how it works when developing software according to

an actual company environment. The courses provided me with technical knowledge, but the truth is that there are many different aspects of the way industry does business that cannot be fully learned in the classroom: team communication, version control discipline, managing deadlines, prioritizing tasks, cycles of review, and collaborating between roles, just to name a few.

To link my academic education with work experience, I have an internship requirement. Being a 4th year student, I see this internship as not just a course; it is a huge step in entering my future career/living out the dream I have had for so long. This experience will provide me with the opportunity to use what I already know to be able to test my skill set and see what I need to improve upon and understand what is expected from a frontend developer in the field of software development.

1.4 Significance of the Internship Experience

Internships are a key component of the engineering education process as they give students the opportunity to apply what they have learned in the classroom in a structured way. While students learn principles independently in an educational setting, when they complete a task in an organization, all these areas come together as one. Students may be required to develop a technical solution for an assignment, communicate with others about the technical solution, develop a good user experience for their design, and understand how the product will be delivered.

Dotech Limited gave me the opportunity to experience how real, world applications can be made practical through academic preparation, as well as develop technical confidence by participating in actual front, end development. I gained an understanding of the pace of developing software as part of a team within an organization and started thinking like someone who has the skills necessary to address everyday issues through developing solutions to those issues.

1.5 Overview of the Report

This is my report on my experience as an intern with Dotech Ltd. In this report I will discuss: the background of the company, what I did while there, what type of work I performed during my time at Dotech Ltd., a description of how I approached completing my tasks, what resources I used, any lessons learned from the experience, as well as any obstacles I faced and what impact these had on the projects I contributed to and my overall development as a professional.

Chapter 2

Background

2.1 Background

This chapter presents essential background information regarding Dotech Ltd, including its history, core mission, organizational values, and the specific role undertaken during the internship period. This overview provides a clear foundation for understanding the enterprise, level technical environment in which the internship was conducted.

2.1.1 Overview of Dotech Ltd

Dotech Limited is a software development company based in Dhaka, providing modern digital solutions for businesses. Their website states they provide web and enterprise software services including ERP, analytics and dashboards, HR, related services, CRM systems, customer engagement tools and AI, based services, as well as being a complete digital partner helping clients from initial idea discovery, through design and development, to deployment. During my internship, I came to understand Dotech Limited as a relatively young and growing software firm with a startup, oriented mindset. The organization began its journey under the leadership of its founding team and has since expanded its service offerings and client base. That sense of being a young company was visible not only in its size, but also in the way it operated: quickly, collaboratively, and with a strong focus on delivering practical outcomes. Public company materials reinforce this image by describing the team as intentionally small, flat, nimble, and human, centred [Dotech Ltd. \(n.d.-a\)](#).



Figure 2.1: Dotech Ltd Logo

The company's operational office is located at Romask Tower, 22/3, Level 12, Karwan Bazar, Tejgaon, Dhaka, 1215, which was also the site of my onsite internship [Dotech Ltd. \(n.d.-e,-a\)](#); [Dotech Limited \(n.d.\)](#).

Being present in the office allowed me to understand not only the technical side of work, but also the pace, communication patterns, and informal problem, solving habits that shape software companies in practice.

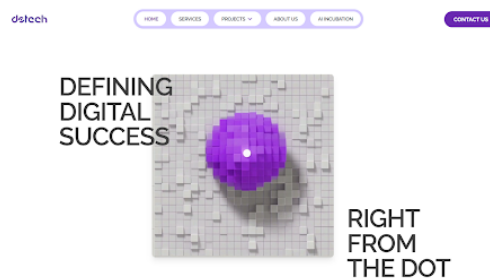


Figure 2.2: Dotech Ltd website

2.2 Mission, Vision, and Business Orientation

Although the company website does not present its mission and vision in the conventional formal format seen in some large organizations, its overall business orientation is clearly expressed. Dotech emphasizes building digital solutions that help businesses grow, adapt, and create measurable impact [Dotech Ltd. \(n.d.-e\)](#). The company's language repeatedly highlights business value rather than technology for its own sake. Its public profile suggests that it sees itself not merely as a vendor, but as a strategic partner that solves business problems through software, design, and emerging technologies [Dotech Ltd. \(n.d.-e,-a\)](#).

From my perspective, the company's practical mission could be understood as delivering fast, industry, grade custom software aligned with client needs. The official website supports this interpretation by stressing outcome, driven development, tailored strategies, and end, to, end support [Dotech Ltd. \(n.d.-e,-a\)](#). In terms of values, several themes stood out consistently: result orientation through clear business goals and measurable outcomes; proactive partnership, presenting itself as a team that brings solutions rather than merely responding to isolated requests; and transparency and collaboration in relation to communication with clients and cross, functional execution [Dotech Ltd. \(n.d.-e,-a\)](#).

2.3 Service Areas and Industry Focus

Dotech Limited operates in several business, oriented software domains. Its core service portfolio includes enterprise ERP solutions, analytics and dashboards, anti, counterfeit and product authentication systems, learning management systems, HR and workforce management tools, AI, powered call and CRM systems, business management systems, and customer engagement and loyalty platforms [Dotech Ltd. \(n.d.-e,-f\)](#). In addition, the company has developed a visible AI, oriented service line under its AI Incubation offering, where it provides solutions such as conversational AI, predictive analytics, fraud detection, custom model training, and AI dashboards [Dotech Ltd. \(n.d.-b\)](#).

The company's public materials indicate that it serves businesses across multiple sectors, including e, commerce, product development, digital transformation, finance, healthcare, retail, recruitment, and real estate [Dotech Ltd. \(n.d.-e,-a,-b\)](#). This cross, industry orientation is important because it shows that Dotech does not operate as a narrowly specialized agency. Instead, it appears to work as a solution, focused software company that adapts its development work to different client contexts. From an internship perspective, this made the environment especially valuable for learning.

2.4 Organizational Culture and Work Environment

One of the most distinctive things about Dotech Limited was its startup, like work environment. The company website openly states that it has kept its team small and its structure relatively flat in order to remain nimble, transparent, and human, centred [Dotech Ltd. \(n.d.-a\)](#). My own experience confirmed that description. The work environment felt dynamic and fast, moving, but not chaotic. There was room to ask questions, discuss solutions, and learn from more experienced developers, yet there was also a clear expectation that work should move forward efficiently.

What stood out to me most was the culture of practical collaboration. Frontend development was not treated as an isolated task. Instead, it was closely connected with design quality, backend integration, deployment readiness, and client, facing expectations. This meant that even as an intern, I had to think beyond the visual layer of a webpage or dashboard, considering usability, responsiveness, maintainability, and how the frontend would fit into the larger architecture of the product.

2.5 My Role and Purpose as a Frontend Developer Intern

My role at Dotech Limited was that of a Frontend Developer under internship status, and the internship offer letter formally placed me in that position for a three, month term beginning on 6 January 2026 [Dotech Limited \(n.d.\)](#). The document also identified Ahmed Hasan Rony, VP & Lead Architect, as my reporting authority [Dotech Limited \(n.d.\)](#). In practice, he functioned as the senior technical lead I reported to directly.

Although I was assigned to the Frontend domain, the responsibilities outlined in my offer letter were very broad and structured very well. The offer included many responsibilities, such as creating reusable components for the UI, integrating frontend with backend and 3rd party APIs, optimizing performance and responsiveness, maintaining code quality, and adhering to accessibility and security principles while collaborating with UI/UX designers and backend developers and documenting my development activities [Dotech Limited \(n.d.\)](#). My own personal goal for this role was twofold; to provide support for building and refining real web interfaces on

actual projects, and also to acquire a suitable mindset as an appropriate Front, End developer.

2.6 Team Structure and Reporting Relationship

Dotech Limited has an apparent small organization multi; disciplinary environment supported by a limited team size and type as represented from the public company information of the to the CEO, CTO with other support staff roles for the UI/UX designers/ full stack developer/backend developers, Frontend Developers Flutter developers. This type of organizational structure suggests individuals each safely work/work alongside each other within close proximity of each other where cross, role communication during day, to, day execution is critical.

My internship experience was especially influenced by this type of structure. I had numerous opportunities to work both directly with technical specifications in terms of frontend development and indirectly through exposure to design decisions made by a designer who was part of our organization. I reported directly to Ahmed Hasan Rony and gained insight into both front, end development of web applications and the individual developers working on them. Ultimately, I understood how to approach software development as a team, oriented activity instead of simply as independent coding activities.

Chapter 3

Internship Activities

My internship at Dotech Ltd focused on Frontend Development, covering the entire frontend of the company website and contributing to a client admin dashboard. I worked with core web technologies, including React, Next.js, HTML, CSS, Tailwind CSS, Framer Motion, and TanStack Query, to build functional and dynamic web applications.

3.1 Nature of Assigned Responsibilities

At Dotech Ltd., my internship work was much wider in scope than simply observational or supporting. I was an Internet Developer Intern when I joined the company, but I became involved in many facets of real production work. In my agreement with the company, I was to be responsible for front, end component development, API integration, performance tuning, collaborating with designers and back, end developers on development documentation [Dotech Limited \(n.d.\)](#), etc. However, I ended up assuming all of the same responsibilities related to the entire implementation cycle, regular report writing, working with other teams, and carrying out quality assurance activities as well.

I was provided with the opportunity to take ownership of various components of real projects rather than simply doing minor features, making my internship experience meaningful and valuable. For example, the largest part of my internship was completely implementing the frontend portion of Dotech Limited's corporate website, and the second most significant piece of work I did was provide contributions to a client's administrative dashboard. Dotech presents itself as being a provider of end, to, end digital solutions through their Enterprise Software Solutions, such

as analytics, dashboards, CRM solutions, HCM solutions, etc., which therefore required not only technical implementation, but also a strong understanding of how to present digital products to users and stakeholders ?.

3.2 Frontend Development of the Company Website

Most of my time at my internship was spent developing and designing the company's website through the creation of a complete Front, End framework going from the global layout down to the individual sections of every page. This meant my responsibilities extended well beyond just making minor User Experience (UX) changes or fixing component issues. I had to consider the entire website as an individual digital product with respect to overall structure, visual flow, section hierarchy, responsive design, and consistency between pages [Dotech Ltd. \(n.d.-a,-b\)](#).

The way I built the site was based on components that allowed for more organization, reuse and manageability of parts across the site. Instead of taking on the site as multiple separate pages, I created it in pieces or sections with various components as needed. This consisted of establishing page structures, layouts for pages, reusable content blocks, interactive sections within those layouts and components of the various section levels in order to scale the website if needed later on.

3.3 Interactive Features, Animation, and Integration Work

In addition to developing layouts, I added interactive features to the website. My main tool was Motion for React (previously known as Framer Motion). This tool adds high, quality, production, ready UI animations to any Javascript, based project [14]. By using this tool, I created multiple types of animation that enhanced the aesthetic flow of the site. The animations provided better focus on content, smoother transitions between sections of the site, and created a more refined and modern browsing experience.

I added EmailJS as a new tool to the site's communication process to allow email form submissions to get sent from the frontend more easily. The functionality provided by emailJS allows email communication to be triggered from an app's

code rather than having to create an email server to do it separately in the instance of simple use cases [EmailJS \(n.d.\)](#). I also completed API integrations and provided assistance to the backend developer creating the API and all associated data to help him understand how to meet the requirements.

3.4 Contribution to the Client Admin Dashboard

In conjunction with the company's website, I have also been involved in creating a client, based admin dashboard project. Because of the nature of being a client, I want to keep the client's name private on the report. Therefore, my role will not be easily identifiable as I did contribute significantly and gained exposure to different types of front, end challenges from this project. This was different from an ordinary public, facing site project in terms of design as this type of project requires a utility, driven, effective layout; clarity of information; and effective & functional categorization.

By Working with the Dashboard in Dotech Technologies, I got to see Requirement Analysis in a more formal structured way. There were a lot of meetings that I attended to understand Project Scope, User Requirements and Anticipated/Expected Functionality pre and during development. These meetings illustrated to me how good work performed on the frontend starts well before the coding process. Analytics and Dashboards are also part of the broader Service Portfolio of Dotech Technologies, so therefore, having this type of work required/enhanced/supported the company's business objectives [Dotech Ltd. \(n.d.-f,-b\)](#).

3.5 Collaboration, Reporting, and Development Communication

Regular day-to-day updates and coordination represented another key element of my responsibilities. As part of this process, I constantly provided updates to my manager on the current status of the project (tasks being completed, issues related to implementation), which clearly demonstrates how visibility is nearly as critical in a software environment as actually doing the work. Progress must be communicated clearly, blockers must be identified early, and, typically, any decisions that need to be made will require coordination or agreement by either a senior developer or a team leader.

Being part of a team working collaboratively with both developers and designers was essential to the success of my position. Because I work for a startup company like Dotech, there isn't a separation between frontend and backend development. As described publicly by Dotech, our organization is small, flat, and collaborative with an emphasis on completing full cycles of development. My own experience working at Dotech has proven this to be accurate. I do a lot of switching back and forth between design interpretation, developing on the frontend, talking about requirements, and coordinating on the backend within the same workflow.

3.6 Documentation, UAT, and Post, Development Responsibility

Once the interface was coded my responsibilities did not stop there. I was also responsible for making sure that the development was properly documented as well as keeping records that would allow others to understand the project in the future. In my offer letter, my internship description outlined maintaining documentation for the frontend components & workflows as an expectation which aligns with this. Therefore, it was necessary to keep track of what was built, how it worked, and how it changed during development.

Besides being involved in UAT, I also completed many other related activities associated with development. After a feature or page was complete, I was responsible for conducting UAT testing from both the user and project acceptance perspectives, identifying issues, and writing the UAT reports. This piece of the project was also

a valuable learning experience for me because it has provided me with additional training to assess my own work more critically. I can no longer simply stop after I have verified that the code is working; now, I must also determine if the feature works as I would expect to when they are used in a live environment, if the flow is logical, and if something would require changing prior to hand off.

Chronological overview of the activities, observations, and tasks recorded during my three-month internship at Dotech Limited are shown in this chapter. I progressively progressed through the various phases of my internship from technical onboarding to implementation of my first real project. The twelve-week duration included participation in the set up of the development environment, study of the flow of work within the company, construction of major components of the company website, preparation of documentation and UAT reports, attendance at meetings, and later, contribution to a client admin dashboard.

3.7 Weekly Activities

Week 1: The initial week's activity consisted mainly of setting up my laptop with all the technology, tools, and software versions that are currently in use at this company; I was also able to examine and learn the way the company conducts business (including researching the use of Git and Atlassian as part of their workflow practices). Through this testing I have come to realize that being a successful software developer does not only rely upon being able to write code, but also upon having processes that are in alignment with the way you work, having tools that are consistent throughout your projects, and following the rules of proper communications.

Week 2: At the end of week two, I received the Figma design for our new company website and was tasked with building out the homepage along with establishing the site's basic structure. This was my first large-scale build project, so this was also the official start of me contributing directly to the website's creation. The homepage was of particular significance because it would serve as the company's public online identity as well as highlight the services that the company offers and the direction that the company wants to take.

Week 3: During week three, I was working on different components of the AI incubator web pages. These involved converting a more complicated, content-heavy

design into a working, functioning front-end, including elements of several types of Dotech's AI-based services such as predictive analytics, conversational AI, and AI dashboards; therefore, these pages are very important from both a structural and visual standpoint.

Week 4: During the fourth week of my Internship, I created the Services Web Page. I also worked on completing one of the hardest parts of my project which was developing a complicated animation. Developing the animation took a lot longer than expected due to the fact that I had to experiment, debug and refine many times throughout the process. The animation turned out to be the most challenging technical task of my Internship.

Week 5: During week five, I created an "About Us" page as part of a Component/Based structure containing the company culture, workflow, and team member descriptions. Developing this page has given me a better understanding of how frontend development adds value by offering not just a functional product, but also establishing a presence and branding for the organization.

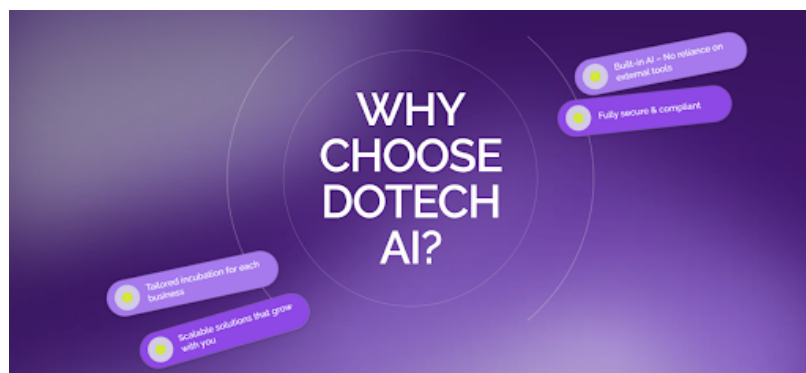


Figure 3.1: A Section of the Dotech Company Website

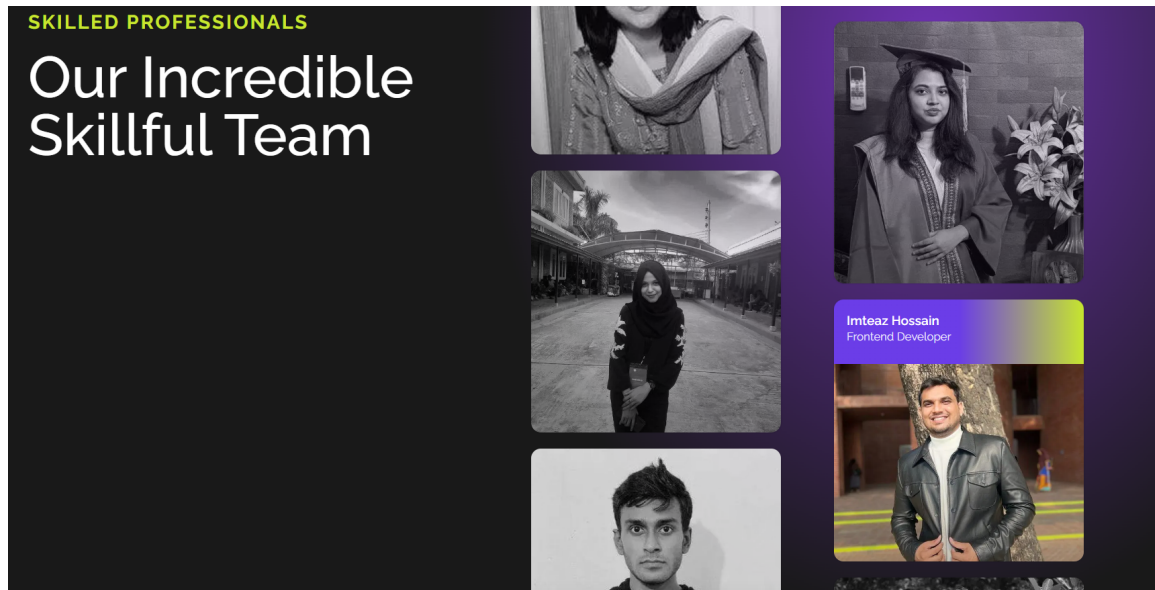


Figure 3.2: About Us Page Section

Week 6: In week six, I created the ‘Services’, ‘Projects’, and other related pages on the website. This process helped me re-evaluate my thoughts about developing scalable front-end structures, how to create reusable templates/patterns, and how to develop content-driven designs.

Week 7: As week 7 progressed, I worked on finalising the website development phase, conducting user acceptance testing (UAT), and documenting everything that I had completed throughout. I have thoroughly reviewed each of the pages implemented to date, identified issues, verified user flows and produced a UAT report. I also documented the work that I completed for development purposes to support the transfer of knowledge and future maintenance, which was one of the formal expectations of my internship position [Dotech Limited \(n.d.\)](#).

Week 8: This week’s activities included meetings and helping my team with intern interviews. While I completed less coding this week than in previous weeks, it provided excellent exposure for me to participate in discussions about requirements, communicating with others in the group, and overall the general atmosphere of how the company operates.

Week 9: I received a new project this week (week 9) where I was provided with a Figma file for the ELF admin dashboard. I then needed to review the design very carefully, including understanding the layout, how it was organized, and what was needed to put the project in place before starting to implement it.

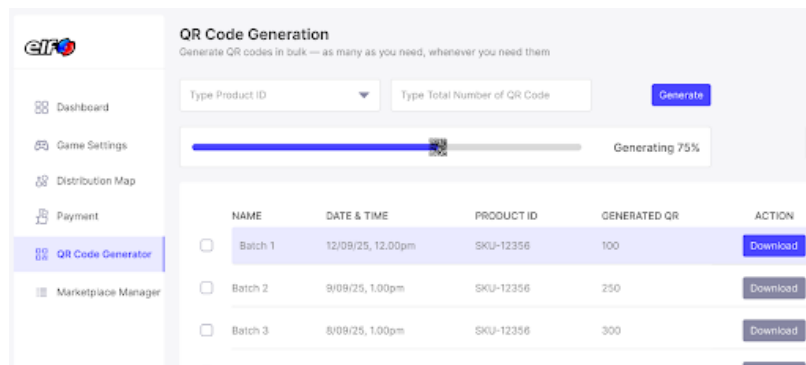


Figure 3.3: ELF Admin Dashboard

Week 10-12: I spent the tenth, eleventh, and twelfth weeks creating the admin dashboard with the assistance of a senior developer. I contributed to the layout of the dashboard and the development of pages for the dashboard. This phase of the project allowed me to gain experience working on an interface-heavy, utility-focused frontend platform, where clarity of the interface and organization of the workflow were important elements in the overall design.

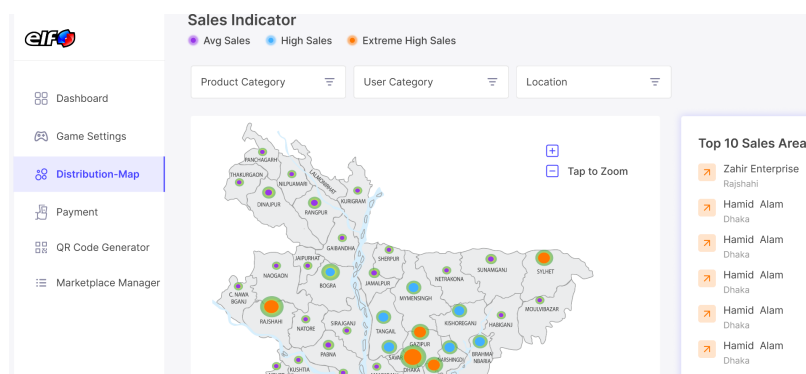


Figure 3.4: ELF map

3.8 Challenges Faced

The complexity of the website design and animations was one of the biggest challenges I encountered during my internship. There were times where I was working on a single animation and would spend days trying to create it. Many of my challenges were overcome by learning new products, trying different techniques, and furthering my knowledge of animation, related products and how things work together in the frontend [Motion \(n.d.\)](#).

The startup-like environment proved to be another significant hurdle, as there was lots of demand placed on the intern by having a large work quantity. The company operated at a rapid pace and because of this, the urgency of completing tasks on time was frequently intense. There were times I needed to work from home to complete tasks, as well as continue working past regular hours, to ensure proper completion of the development tasks. My internship also indicated interns would possibly be asked to do some of their work remotely due to urgent deadline compression or heavy workloads [Dotech Limited \(n.d.\)](#); this was consistent with my internship experience as well.

As a student entering a real software company, I had to adapt quickly to new expectations regarding the work environment, how to communicate with co-workers, and how to meet deadlines. There was a lot of pressure on me to fit in and show that I could contribute to the team from the beginning. Although this adjustment was not always easy, it eventually helped me become more disciplined, more confident, and more aware of professional development practices.

3.9 Summary

All things considered, the activities that took place during my internship at Dotech Limited demonstrated a definite flow. First, there was environment and process familiarization; after that came the actual frontend implementation of the website; afterwards came testing, writing reports, meetings and finally, building the dashboard. The opportunity to be involved in both frontend web development and backend programming provided an excellent learning experience.

Chapter 4

Methodology

4.1 Overview

In terms of the approach adopted during my internship with Dotech Limited, it was very pragmatic and task-driven. Given the nature of the firm's operations, which was akin to that of a startup, tasks were normally allocated to interns directly by senior colleagues depending on the projects being handled. My responsibilities were primarily centered around developing frontend user interfaces from design documents via an established development framework.

4.2 Technology Stack

During the course of my internship, the technologies that I used were Next.js, React, JavaScript, and Tailwind CSS. For animations and interactivity, Framer Motion was utilized, which is a Motion library for React. The other technologies I used include EmailJS, Git, GitHub, Figma, Lucide React, React Icons, shadcn/ui, TanStack Query, and SVG, depending on the requirement [Meta Open Source \(n.d.\)](#); [EmailJS \(n.d.\)](#).

4.3 Development Process

My typical development process consisted of getting the design through Figma. First, I analyzed the design and figured out the function of every element on the site. Next, I segmented the design elements into smaller reusable components like layouts, cards, buttons, forms, and common sections. After that, I constructed the basic page design and applied styles to it, ensuring that it worked across different

devices. Finally, I implemented animations, connected API services, and performed testing of the final result.

This approach, which can be considered similar to agile development, allowed me to be more methodical and efficient in my work while making it easier for me to apply the feedback provided by my peers.

4.4 Component Design and Responsiveness

Component-based development was one of the techniques used during my work. The aim was to have reusable components in order to ensure that my code stays clean and can be scaled. Instead of creating code from scratch, I created common layouts, UI components, reusable cards, buttons, and forms. Component-based architecture is what the React framework encourages; it is also mentioned in the React official documentation [Meta Open Source \(n.d.\)](#).

When developing responsively, I ensured that my application works on both desktop and mobile devices. At some point, I did not have a mobile layout in Figma, which forced me to create my own. This practice has taught me how to create designs that can be easily transferred into code [Mozilla Developer Network \(n.d.\)](#).

4.5 Animation and API Integration

Animation became one of the trickiest aspects of my methodology. There were complicated animations in some websites that would take me several days to create. To create them in a proper way, I needed to explore various techniques and their implementation. In particular, I had to try out a few solutions until one of them could be implemented without difficulties. To produce grade animation effects, I utilized Motion for React [Motion \(n.d.\)](#).

For integrating APIs, at first, I talked about the necessary data structure to the backend developer in terms of the front-end side. Then, the developer gave me the required API endpoints, which I used when integrating APIs into the frontend. Asynchronous data handling with respect to caching and server synchronization was done via TanStack Query [TanStack \(n.d.\)](#).

4.6 Testing, Documentation, and Reporting

Before declaring any task to be done, I made sure that the output generated fit the design, that the data was loading appropriately, that the functionalities were working fine, and that the website/web application worked flawlessly. This was the foundation of my testing and UAT procedure.

Chapter 5

Analysis and Findings

This chapter will be dedicated to a comprehensive reflection on my internship experience at Dotech Ltd. The discussion will revolve around important discoveries, personal growth, and practical experience gained through frontend development technology. This is where the accomplishments, learnings, and technological tools applied during my internship will be discussed. I have also provided a user manual for my software creation to facilitate usage.

5.1 Project Outcomes

As part of the internship at Dotech Ltd, I was able to gain firsthand knowledge about web application development. From working on actual projects, mainly the organization's official website and the ELF admin portal, I was able to learn that it is essential for a developer to link an effective frontend to a well-designed backend using appropriate APIs. This has helped me understand the interplay between coding, design, and data management within software development. These observations show that I have been able to turn my theoretical understanding into practical knowledge.

5.1.1 Personal Portfolio / Company Website

The final product of the internship was the full development of the frontend side of the Dotech Limited company website. It entailed the development of the homepage, the AI Incubation page, the About Us page, the Services pages, project pages with

animations, and other relevant features. It used Next.js and React for its development, while Tailwind CSS was utilized for its styling. Motion for React (Framer Motion) [Meta Open Source \(n.d.\)](#) was used to create the necessary animations.

5.1.2 Custom Admin Panel (ELF Dashboard)

Apart from the website, I made significant contributions to the admin panel for the client at Dotech Limited. The idea behind creating the dashboard was to ensure that the client could monitor all operations in different departments in their organization. In my contribution, I concentrated on the structure of the dashboard panel as well as some of the pages, such as the distribution map page. The dashboard was developed using the same technology stack of Next.js, React, and Tailwind CSS, with TanStack Query handling the data fetching process [Meta Open Source \(n.d.\)](#); [Vercel \(n.d.\)](#); [TanStack \(n.d.\)](#).

Creating an admin dashboard is quite different from working on a website that will be accessed publicly. The focus in the former is on ensuring ease of use even when used repeatedly every day. Therefore, considerations like information hierarchy, workflow, and effective utilization of space on the screen become central issues in design.

5.2 Learning and Development

5.2.1 Technical Learning

From these projects, I acquired an in-depth insight into the functioning of modern frontend frameworks in practice. I received hands-on experience in working with such technologies as Next.js, React, Tailwind CSS, HTML, CSS, SVG based implementation, icons, and API integration [Meta Open Source \(n.d.\)](#)-[Tailwind Labs \(n.d.\)](#). However, it is worth noting that I have learned not only these technologies themselves but also how to use them for creating functional applications.

During the internship, my skills in developing complicated UI design and animations were enhanced. While designing the company's website, I faced challenges related to advanced visual aspects and interactions between different elements of the design. These challenges helped me acquire new skills and knowledge in practice instead of through theoretical studies.

5.2.2 Professional Learning

In addition to technical knowledge acquisition, there were various soft skills, which are necessary for any software company employee, that I managed to learn during my internship. Such skills included time management, working with people, communication, and professionalism in a fast-paced setting. Furthermore, I got an insight into how grade industry projects are created with the help of frontend and backend developers, designers, and other employees of the company.

Another significant skill I gained from the internship was how to be a part of a corporate team. The experience taught me how to regularly update on one's progress, work in the context of deadlines, attend different kinds of meetings, and do one's part within the framework of a greater task.

5.3 Tools and Technologies Used

5.3.1 Frontend

The primary frontend frameworks used in the internship included React and Next.js for component based programming and server-side rendering, Tailwind CSS for utility-first styling, HTML5 and CSS3 for structure and presentation layering, and ES6+ JavaScript for logic and interactivity [Meta Open Source \(n.d.\)](#)–[Tailwind Labs \(n.d.\)](#). Other technologies that were frequently utilized include SVG for assets and animations in the more design-intensive portions of the corporate website.

5.3.2 Libraries and Tools

Some of the libraries and tools used to support this application were: Framer Motion – Motion for React for UI animation [Motion \(n.d.\)](#); TanStack Query for server state and data fetching [19]; EmailJS for front-end and side-email integration [EmailJS \(n.d.\)](#); and shadcn/ui and Lucide React for accessibility in UI components and icons.

5.3.3 Development Environment and Version Control

All programming work was done using Visual Studio Code, which acted as the main editor used for coding during the internship period. On the other hand, all versioning was handled by Git and GitHub, adhering to conventions of branch creation and committing practiced by the rest of the team members.

5.4 User Guidelines

5.4.1 Company Website

The navigation of the Dotech website (<https://www.dotech.biz/>) is structured in such a way that allows easy navigation for any user. There are several sections on the website that can be accessed via the navigation bar at the top – these sections include Home, Services, Projects, About Us, AI Incubation, and Contact. On mobile, the navigation changes to become responsive. Visitors who want to know more about Dotech’s services can visit the Services, Projects, and AI Incubation pages, where there will be more information available. The Contact section contains a form integrated using EmailJS that lets the users fill out an enquiry in their browsers.

5.4.2 Admin Dashboard

In this sense, the influence of my efforts made a significant difference both to Dotech Limited and to their client. The first gained a brand new website, which allowed them to enhance their online representation and get a full-fledged platform to showcase themselves, their values, and services to potential customers. For their part, the client project got the development of the admin dashboard, which became ready-made. On my side, the fulfillment of this task is what I found most satisfying about the internship experience – my efforts became applicable rather than training-related.

5.5 Summary of Findings

In conclusion, it was clear that frontend engineering entails more than just design but involves issues of performance, collaboration, usability, and structured problem-solving. In this respect, my internship experience allowed me to improve my technical and soft skills as well as gave me the assurance that I am capable of contributing to real-world software engineering projects. From this experience, it is evident that industry growth necessitates technical expertise, teamwork, and adaptation to change.

Chapter 6

Conclusions and Recommendations

6.1 Conclusion

Being an intern at Dotech Limited was a very valuable experience for me, both from the point of view of personal skills improvement and further career. This gave me an opportunity not only to apply theoretical knowledge obtained from studying at the university but also to implement practical experience in developing software products in a professional environment. While interning at the firm, I was involved in creating a website for the company and the creation of an admin dashboard for one of its clients.

In summary, the internship made it clear that I am interested in working in frontend development. Moreover, during this internship, I understood that success in the software industry requires more than theoretical knowledge and skills, it also presupposes discipline, good communication skills, ability to work in a team, adaptability, and learning attitude. Thus, apart from being a degree requirement, the internship turned out to be the beginning of my professional life.

6.2 Major Benefits of the Internship

One of the most important advantages I gained in the process of my internship was personal growth in the field of technology. It enabled me to use frontend frameworks, styling technologies, animations, and API connections to build websites. In addition, I could see how different technologies are integrated to create digital projects. One of the other main advantages was gaining confidence when delivering something real compared to only classroom assignments.

Moreover, the internship was useful for improving collaboration skills, learning how to communicate with people, and managing my time correctly. Due to the need to work on the report, communicate with developers and designers, and adhere to a set timeline, I got acquainted with the necessary professional skills needed at a software company.

6.3 Limitations of the Internship

However, despite its usefulness and importance, this internship had some disadvantages. First of all, I could not learn much about the backend side of coding since my work was focused on frontend coding. In this regard, while getting an opportunity to work alongside the developers of backend, I acquired less information on the subject than on others.

The next disadvantage of the internship was related to its short term – it lasted only three months and allowed me to get involved in the project only for a brief period. Another disadvantage was that, being an entrepreneur like company, it required high efficiency and speed of work from me. Moreover, I did not have enough access to the decision making on the projects implemented by the company.

6.4 Recommendations for Dotech Limited

From my personal experience, I would advise Dotech Limited to develop an organized onboarding process for interns to enable them to adapt faster to the software, work process, and company requirements. This is because the firm operates in a dynamic work environment, hence, offering proper orientation to the interns at the start of their placement will aid them in becoming productive faster.

In addition, I would advise the firm to have a proper handover of design and accurate planning of extremely intricate animation work. The animations that I undertook during my internship period were quite time consuming, and having a detailed discussion about the technical aspect of the work at the beginning of the task would have made it easy to undertake.

6.5 Recommendations for Future Interns

As for recommendations for future interns, the first thing would be to learn the basics of React, Next.js, JavaScript, and responsive frontend development. Since project work goes quite fast, it will be easier if you start from something basic. It is also crucial to master component-based development and debugging skills since a lot of problems that arise in frontend development can have small reasons but be important enough.

Communication skills should also be strengthened, together with being patient and attentive. Future interns should ask clear questions, report on their progress, and not get upset when encountering bugs and difficulties. Moreover, those who start with frontend, according to me, should learn about backend development and DevOps gradually.

6.6 Recommendations for the University and Internship Program

I would suggest that more emphasis is put on preparing the students for their future career in the industry by preparing them prior to their internships. Specifically, having better practical experience in Git, working in teams, documenting, and project work will allow students to be more prepared for the transition into professional life. While coursework is necessary and essential to prepare the students technically, internship demands that students quickly learn how to work together using tools provided for communication, as well as reporting and so forth.

It may be useful for students to be introduced to real-life situations in development before they go on to their internships. For example, it will be useful for them to undergo some form of project-based course, version control and collaboration, designing, to coding tasks.

6.7 Final Remark

In conclusion, the Dotech Limited internship program was a productive experience for me in every sense of the word. The program helped me develop my technical skills and professional knowledge and made me feel confident about my capability of contributing to real-world software applications. Even though the internship had certain drawbacks, overall it served its academic and professional objective well.

Chapter 7

Conclusions and Recommendations

7.1 Conclusion

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Chapter 8

Acknowledgments

I want to extend my sincere gratitude to all those who helped me in successfully completing my internship and this report. In the first place, I want to thank the University of Liberal Arts Bangladesh (ULAB) and the Department of Computer Science and Engineering for having provided me with this opportunity to pursue my internship within the course of my academic study. Indeed, such an initiative has made a vital contribution towards the development of my undergraduate career by making a bridge between academics and practical experience. I would especially like to extend my sincere thanks to my supervisor from the university, Mr. Kaviul Hossain, for the excellent supervision, assistance, and support he offered during the whole period of internship and during the writing of this report. The supervision played a key role in completing this assignment in a proper academic manner. Last but not least, I want to extend my sincere gratitude to Dotech Limited for giving me the chance to work as a Frontend Developer Intern at their company. Special thanks are extended to my industrial supervisor, Ahmed Hasan Rony, VP & Lead Architect of Dotech Ltd, for his supervision and technical guidance throughout the internship period. With his valuable direction and suggestions, it became possible for me to know about the standards of actual software development in the real world and thereby enhanced my professional and technical capabilities. I would also like to acknowledge the efforts and contribution of my seniors, colleagues, and teammates present in the office during my internship for helping me in an efficient manner and giving their complete support to me. Lastly, my family members deserve thanks for their continued encouragement and support during my academic life and internship period.

Appendix

8.1 Internship offer latter



Date: 06/01/2026

To: Md. Imteaz Hossen

Email: imteaz.hossen693@gmail.com

Phone: +880 1621189202

Address: Hazaribagh, Jhawchar, Shopnodanga housing society, Dhaka.

Subject: Offer of Internship – Frontend Developer.

Dear Md. Imteaz Hossen ,

We are pleased to give an offer of internship to you for the position of Frontend Developer at Dotech Limited. Your skills, experience, and leadership make you an ideal fit for our organization, and we are excited about the opportunity to have you on our team.

Below are the terms and conditions of your Internship with Dotech:

- i. You shall not divert or attempt to divert from the Company any business the Company enjoyed or solicited from its customers;
- ii. You shall not solicit or attempt to induce any customer, supplier, partner or other person or entity with whom the Company has, or is attempting to establish, a commercial relationship to cease or refrain from doing business with the Company or to alter its relationship with the Company in any way adverse to the Company;
- iii. You shall not make any false, misleading or disparaging representations or statements regarding the Company or the products or services of the Company to any third party; or make any statement to any third party that may impair or otherwise adversely affect the goodwill or reputation of the Company;
- iv. You shall not, either while acting on behalf of the Company or in the pretext thereof, accept from any person or entity, any consideration for any assessment or decision that may be favorable to that person or entity. Such consideration shall include any item or conduct that may be of value such as a gift, bribe, payment, performance, favor, etc.;
- v. You shall not indulge and/or take part in any activity found to be detrimental in the interest of the Company in any way. Such an action shall be deemed as infringement to service conditions of the Company and amount to causing damage to its interest and shall call for disciplinary action being taken against you, as it may deem fit and appropriate;

Figure 8.1: Internship offer latte

References

- Bangladesh Association of Software and Information Services. (n.d.). *About basis*. <https://basis.org.bd/>. (Accessed: Apr. 17, 2026)
- Bangladesh Hi-Tech Park Authority. (n.d.). *About us*. <https://ossbhttpa.gov.bd/>. (Accessed: Apr. 17, 2026)
- Dotech Limited. (n.d.). *Offer of internship – frontend developer*. (Internship offer letter, Jan. 6, 2026)
- Dotech Ltd. (n.d.-a). *About us — dotech ltd.: Innovative it solutions*. <https://www.dotech.biz/about>. (Accessed: Apr. 17, 2026)
- Dotech Ltd. (n.d.-b). *Ai incubation — dotech ltd.: Innovative it solutions*. <https://www.dotech.biz/ai>. (Accessed: Apr. 17, 2026)
- Dotech Ltd. (n.d.-c). *Analytics & dashboards — dotech ltd.: Innovative it solutions*. <https://www.dotech.biz/services/ANALYTICS>. (Accessed: Apr. 17, 2026)
- Dotech Ltd. (n.d.-d). *Enterprise erp solutions — dotech ltd.: Innovative it solutions*. <https://www.dotech.biz/services/ERP>. (Accessed: Apr. 17, 2026)
- Dotech Ltd. (n.d.-e). *Home — dotech ltd.: Innovative it solutions*. <https://www.dotech.biz/>. (Accessed: Apr. 17, 2026)
- Dotech Ltd. (n.d.-f). *Services — dotech ltd.: Innovative it solutions*. <https://www.dotech.biz/services>. (Accessed: Apr. 17, 2026)
- EmailJS. (n.d.). *Getting started*. <https://www.emailjs.com/docs/>. (Accessed: Apr. 18, 2026)
- Google Developers. (n.d.). *Web performance*. <https://web.dev/performance/>. (Accessed: Apr. 17, 2026)
- International Trade Administration, U.S. Department of Commerce. (n.d.). *Bangladesh: Information and communication technology (ict)*. <https://www.trade.gov/>. (Accessed: Apr. 17, 2026)

- Meta Open Source. (n.d.). *React — the library for web and native user interfaces*. <https://react.dev/>. (Accessed: Apr. 18, 2026)
- Motion. (n.d.). *Motion for react — production-ready animation library*. <https://motion.dev/docs/react>. (Accessed: Apr. 18, 2026)
- Mozilla Developer Network. (n.d.). *Responsive design*. <https://developer.mozilla.org/>. (Accessed: Apr. 17, 2026)
- Tailwind Labs. (n.d.). *Utility-first fundamentals*. <https://tailwindcss.com/docs/utility-first>. (Accessed: Apr. 18, 2026)
- TanStack. (n.d.). *Tanstack query — asynchronous state management*. <https://tanstack.com/query/latest>. (Accessed: Apr. 18, 2026)
- Vercel. (n.d.). *Next.js by vercel — the react framework*. <https://nextjs.org/>. (Accessed: Apr. 18, 2026)
- World Wide Web Consortium. (n.d.). *Wcag 2 overview*. <https://www.w3.org/WAI/standards-guidelines/wcag/>. (Accessed: Apr. 17, 2026)