

Bridging Design and Development: My Frontend Internship Journey at HRsoftBD

by

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*Internship report (CSE4099-A) 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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DECLARATION

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I declare that this internship report entitled *Bridging Design and Development: My Frontend Internship Journey at HRsoftBD* 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 **Bridging Design and Development: My Frontend Internship Journey at HRsoftBD**, submitted by **Tasnia Tasnim Konika** (Student ID: 213014016) 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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Finally, I would like to thank all the people who have supported me to complete the Internship directly or indirectly.

Tasnia Tasnim Konika

University of Liberal Arts Bangladesh

Date: April 21, 2026

Dedicated to
my loving Parents

– *Tasnia Tasnim Konika*

EXECUTIVE SUMMARY

My internship was at HRsoftBD, a Dhaka-based software company, and I was aspiring to use my theoretical knowledge in the actual frontend development and design. Being a Web Developer Intern with design orientation on frontend, I was engaged in designing and developing various web-based sites, such as Home Decor, Mood Web, Smart Pizza, News Magazine and a Quiz Application. Through these projects I was able to find out about creative and technical aspects of developing a modern web.

My duties were to develop user interface designs in Figma and develop web pages in HTML, CSS, JavaScript, React, and Bootstrap. I was also involved in enhancing the current software, including debugging the design of the Tracker software used in the company, making it easier to use and more visually appealing. These activities demanded effective knowledge on design principles, responsiveness and user-focused thinking.

During the internship, I had a mentor to supervise me and was engaged in the meetings and feedback on the progress. This made me realize how professional workflow, communication, and iterative design improvement can work. Among the key challenges that I encountered was how to develop interfaces that are attractive and user friendly. It took a lot of learning and perfecting my design method to achieve the desired quality of look at a minimal level.

All in all, this internship made my technical skills, design thinking, and teamwork as well as confidence much stronger. It has equipped me with useful information on real-life project development and equipped me with future frontend development and UI/UX design jobs.

Keywords: Frontend Development, UI/UX Design, Responsive Web Design, React.js, Figma, Web Application Development, Design Thinking, HRSoftBD

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Chapter 1

Introduction

1.1 Introduction

Internships are significant in the closing of the gap between academic learning and the practice. This report describes my internship experience in HRsoftBD where I was a Frontend Web Developer Intern with emphasis on UI/UX design.

In the internship, I worked on the development and design of responsive web applications. One of my major responsibilities was to design user interfaces and prototypes in Figma, where I was responsible to design user interfaces that are easy to use and appealing to the eyes.

Some of the projects that I worked on were Home Decor, Mood Web, Smart Pizza, News Magazine, and a Quiz Application. Another task that I did was to enhance the user interface of the existing software, such as making the dashboard of the Tracker Software more user-friendly.

Altogether, this internship enhanced my technical skills, design thinking, and concept of user-centered design, equipping me to work as a frontend developer and UI/UX designer in the future.

1.2 Objective of the internship report

The primary aim of this internship report is to give a comprehensive account of the knowledge, skills and hands on experience acquired during my internship at HRsoftBD as a Frontend Web Developer Intern. The report is indicative of the way in which academic learning can be practically implemented in a professional setting. The particular aims of this report include:

1. **To be able to use Theoretical Knowledge in Practical Dynamics:** To fill the gap between theory and practice by working on real-life projects using theoretical concepts of web development and design.
2. **To acquire Technical Frontend Development Skills:** To acquire practical skills in the current frontend languages like HTML, CSS, JavaScript, React, and Bootstrap to develop responsive and interactive web apps.
3. **To Improve UI/UX Design:** To create user-friendly, intuitive, and aesthetically pleasing interfaces via wireframing, prototyping, and applying design principles with Figma.
4. **To understand the Software Development Lifecycle:** To have an understanding of various phases of the project development such as planning, designing, development, testing and repeated improvement within a professional environment.
5. **To Enhance thinking and analysis:** To determine the problems in design and usability, examine the needs of the users, and apply effective solutions to improve the overall user experience.
6. **To acquire Professional Work Experience and Team Collaboration Skills.:** To learn the dynamics of the work environment through working under a mentor, attending to meetings, receiving feedbacks and working in a team set-up.
7. **To Reflect on and Document Internship Experience:** To document the work done, difficulties met, and lessons learnt in a systematic manner, both to academic consideration and personal development.

Chapter 2

Background Of Company

The HRsoftBD is a privately owned software development firm located in Dhaka, Bangladesh, and founded in 2012. The company has gained a reputable reputation in the IT industry over the years due to offering diverse and innovative and reliable IT solutions. Its services are software, web, and mobile application development, Optical Mark Recognition (OMR) and ballot counting solutions, ERP and HR/pay-roll systems, digital marketing services, bulk SMS solutions, domain hosting, and AI-powered tools [HRSoftBD \(2025a\)](#). Through the constant change in the technological trends, HRsoftBD has become a flexible and customer-oriented organization with the ability to address the various business requirements.

Over the years of its operations, the company has been able to serve a wide range of customers including government agencies, individual organizations and global organizations. Having successfully completed more than 491 projects and an increasing number of around 25-35 professional staff, HRsoftBD has served as a consistent growth, technical master and keen on providing quality services [HRSoftBD \(2025a\)](#). Its existence in various fields indicates its ability to deal with complicated and massive projects effectively.

2.1 Mission and Vission

HRsoftBD mission is to offer quality services to clients with a sense of creativity, honesty, responsibility and hard work. The mission shows the commitment of the company to a high ethical standard and the satisfaction of the clients and long-term relationships. Its mission is to be an international known provider of IT and software solutions and to ensure excellence and innovations on the international

level. This vision makes the company strive to keep on enhancing its technologies, processes and service standards [HRSoftBD \(2025b\)](#).

2.2 Purpose of the Internship and Role within the company

The main aim of the internship was to acquire hands-on experience in a real world software development setting and to help close the gap between theory and practice. It was also designed to offer practical experience in learning modern frontend technologies and the practice of UI/UX design as one develops the skills necessary to work in web development. Developing problem-solving skills, knowledge of user needs, and the use of design thinking to develop effective and user-friendly digital solutions were also the priorities of the internship. It was also a chance to get acquainted with the dynamics of working in the team, such as teamwork, communication, and improvement based on feedback.

The internship was done in HRsoftBD where I was an intern in the Frontend Web Developers. I was mostly engaged in designing and developing responsive web interfaces on different projects. I designed user interfaces and prototypes in Figma, paying attention to the structure of the layouts and colors, typography, and user experience. These designs were subsequently translated into functional web apps with HTML, CSS, JavaScript, React, and Bootstrap.

Besides the creation of new projects, I also worked on the enhancement of the existing systems by detecting and eliminating the problems of the design to make them more usable and visually consistent. I had a mentor to work with and took part in meetings and used feedback to improve my work. These responsibilities allowed me to get a valuable experience in both design and development processes and in better understanding of user-centered design and professional practices of software development.

Chapter 3

Scope of Work

In my internship in HRsoftBD, I received numerous tasks and responsibilities that enabled me to have a hands-on experience in frontend development, UI/UX design, and software analysis. I worked on both web-based applications design and development and on already existing systems.

- **UI/UX Design with Figma:** Created user interfaces and interactive prototypes in Figma, paid attention to the structure of the layout, color scheme, typography, spacing, and visual hierarchy to make the design clean, modern, and user-friendly. Developed several design ideas and improved them according to the usability and feedback.
- **Frontend Development/Design Implementation:** Translated Figma designs into web interfaces that are fully operational and responsive, using HTML, CSS, JavaScript, React and bootstrap. Guaranteed compatibility across devices and ensured consistency in design between varying screen sizes.
- **Web-Based Projects:** Coded on numerous projects such as Home Decor, Mood Web, Smart Pizza, News Magazine and a Quiz Application. Designed structured layouts, re-usable components, and interactive functions to improve user interaction and experience.
- **CRUD Operations Implementation:** Designed and developed CRUD (Create, Read, Update, Delete) capabilities to a political leader site called “AZM Zahid.” Monitored dynamic data processing and appropriate integration of frontend elements and data processing.

- **UI Improvement and Software Analysis:** Studied an employee tracking system user dashboard to find out its usability problems. Offered and executed enhancements regarding data representation, layout and user interaction to advance the general user experience.
- **Data Conversion and Processing Activities:** Conversion of PDF to Excel format of the data in order to enhance data organization, accessibility and usability in operations and reporting of the internal system.
- **Software Testing and Authentication Checking:** Carried out a test of various software systems, such as OMR software, hotel management systems and payroll websites. Concentrated on authentication modules like the validation of logins, user access control, and error control to achieve system reliability and security.
- **Mentorship, Meetings and Feedback Integration:** Worked under the supervision of a mentor, participated in regular meetings, and incorporated feedback into design and development tasks. Followed an iterative approach to continuously improve the quality of work.

Table 3.1: Projects and Tasks Completed During Internship

Project Name	Technologies Used	Tasks Performed
Interactive product card and food ordering UI/UX	Figma(Auto layout, strong typography, Prototyping)	Designed A modern and visually appealing product card UI design focused on strong UI/UX principles, clean layout structure, and component-based design.
Home Decor Website	HTML, CSS, Bootstrap, JavaScript	Designed UI in Figma, created responsive layout, implemented visually appealing homepage and product sections
Mood Web	HTML, CSS, JavaScript, Bootstrap	Designed interactive UI, focused on user-friendly layout and smooth navigation experience
Smart Pizza Website	HTML, CSS, Bootstrap, JavaScript, XAMPP	Designed food ordering interface, implemented responsive design and attractive visual components
News Magazine (News-Mag)	React, Bootstrap, JavaScript, API	Developed dynamic news website, implemented API integration, created reusable components and navigation system
Quiz Application	React, HTML, CSS, JavaScript	Developed interactive quiz interface, implemented logic for question handling and user interaction
AZM Zahid Website	CRUD operation, MySQL	Implemented CRUD operations, managed dynamic data display and user interaction
Employee Tracker Software	UI/UX Design analysis	Analyzed dashboard UI, improved data visualization, enhanced usability and layout clarity
Multiple Software Systems	Testing Tools, Manual Testing	Tested authentication systems (OMR, Hotel Management, Payroll), validated login, user access, and error handling
Data Conversion Tasks	Excel, PDF Tools	Converted data from PDF to Excel, organized and cleaned data for better usability

Chapter 4

Internship Activities

4.1 Introduction of the Organization/Institution

HR Soft BD is a software development firm that has been developing digital products for over 10 years and is a certified Information Technology Company, registered by the Bangladesh Government having over 13000 clients. It has been in operation since 2012, and it is based in Dhaka. Website: [HrsoftBD](#).

Whatever we do, we have the ultimate aim of satisfying the needs of our clients as far as is possible. We provide our services with one thing in mind - they can be not less than of the finest quality.

4.2 Services and Projects of the Organization

HRsoftBD offers a comprehensive portfolio of IT solutions and services that cater to the diverse needs of businesses, government organizations, and institutions. The company focuses on delivering innovative, scalable, and user-friendly digital products across various domains.

4.2.1 Core Services

The key services provided by HRsoftBD are outlined below:

- **Website Design and Development**

The company develops dynamic, responsive, and visually appealing websites tailored to client requirements, including corporate websites, e-commerce platforms, and online news portals.

- **Software Development**

HRsoftBD provides customized software solutions such as ERP systems, accounting software, hotel management systems, and payroll systems to enhance organizational efficiency.

- **Mobile Application Development**
The company develops Android, iOS, and hybrid mobile applications with modern features and user-friendly interfaces.
- **UI/UX Design Services**
It offers creative and user-centered design solutions that improve usability and enhance user experience through effective visual communication.
- **OMR and Ballot Counting Solutions**
Specialized systems based on Optical Mark Recognition (OMR) and secure ballot counting are developed for institutions requiring accurate and reliable data processing.
- **Digital Marketing and Communication Services**
Services include SEO, online marketing, bulk SMS marketing, email marketing, and voice call services to support business growth and customer engagement.
- **Domain Hosting and IT Consultancy**
HRsoftBD also provides domain registration, hosting services, and IT consultancy to assist organizations in their digital transformation.

4.2.2 Major Products and Projects

HRsoftBD has developed and delivered a wide range of software products and systems, including:

- **OMR Software and Image Processing Systems**
Used for automated data collection and analysis in educational institutions and organizations.
- **Ballot Counting Software**
A secure and reliable system designed for elections, clubs, and associations to ensure accurate vote counting.
- **ERP and HR/Payroll Systems**
Enterprise-level solutions that help organizations manage operations, employee data, and financial processes efficiently.
- **Online News Portal Systems**
Development of modern, responsive digital newspaper platforms with real-time content management capabilities.
- **E-commerce Platforms**
Custom-built online shopping systems that support business growth through digital commerce solutions.
- **Bulk SMS and Voice Call Systems**
Communication platforms used for marketing, notifications, and customer engagement.

- **Specialized Management Software**

Includes hospital management systems, diagnostic systems, and other customized enterprise solutions for various industries.

Overall, HRsoftBD operates in the IT services and software development industry, delivering a wide range of projects that combine technology, innovation, and user-centered design. Its diverse service offerings and successful project implementations demonstrate its capability to handle complex and large-scale digital solutions.

The company has more than 13,000 clients and is located in Dhaka, Bangladesh. Having 4,604 likes on Facebook and being one of the most popular software development. HRsoftBD is a company that has established itself as a complete solution in Bangladesh. An IT solutions provider that serves various needs of businesses in different industries in Bangladesh and beyond.

It is a certified Information Technology Company, registered by the Government of Bangladesh, taking care of the observation of local regulations and standards in the IT sector. We are dedicated to your project and are eager to see that expression of delight in the face of your conception, which betokens the client-centric approach and dedication to project success.

4.3 Work Accomplishment

4.4 Internship Activities Review

This section presents a systematic review of the activities undertaken during the HRsoftBD internship. It highlights the knowledge gained through observation, practical involvement, and continuous learning throughout the internship period.

- **Observed:** The internship program provided an overview of a professional software development environment, including project planning, UI/UX design processes, and frontend implementation. It also offered insights into analyzing user requirements and transforming them into functional and visually appealing web interfaces.
- **Experienced:** I gained hands-on experience in designing user interfaces using Figma and developing responsive web applications using HTML, CSS, JavaScript, React, and Bootstrap. Additionally, I worked in a structured environment under mentorship, participated in meetings, and incorporated feedback to improve my work.
- **Performed:** During the internship, I actively contributed to various assignments. I designed multiple web applications, including Home Decor, Mood Web, Smart Pizza, News Magazine, and a Quiz Application. I also implemented CRUD operations in the AZM Zahid website, enhanced the user interface of an employee tracking system, converted PDF files to Excel format, and tested authentication systems using software such as OMR tools, hotel management systems, and payroll applications.

- **Understood:** These activities enhanced my understanding of user-centered design, responsive development, and real-world problem-solving approaches. I also recognized the importance of usability, efficient data management, and system reliability in developing effective software solutions.

Furthermore, this internship highlighted the gap between theoretical knowledge and practical application. While academic learning provided foundational concepts, real-world tasks required adaptability, critical thinking, and continuous improvement. Overall, this experience significantly strengthened my technical skills, design thinking abilities, and professional readiness.

Table 4.1: Weekly work summary

Week	Work Description
Week 1	Implemented basic CRUD operations for AZM Zahid website , handling dynamic data
Week 2	Performed data conversion tasks (PDF to Excel) for better data organization
Week 3	Improved UI of Employee Tracker Software , focusing on dashboard usability
Week 4	Analyzed employee tracking software dashboard; worked on data visualization concepts and usability improvements
Week 5	Designed and developed Home Decor website with responsive layout
Week 6	Designed and developed Smart Pizza website with attractive UI and responsive components
Week 7	Worked on Mood Web project , focusing on UI design and smooth navigation
Week 8	Developed News-Mag React application with API integration and responsive UI
Week 9	Developed Quiz Application with interactive features using JavaScript
Week 10	Tested authentication systems in OMR software, hotel management system, and payroll website
Week 11	Designed Mockup UI designs in Figma, focusing on color, typography, and user-friendly structure
Week 12	Final refinement of projects, incorporated feedback, and reviewed overall learning outcomes

4.5 Challenges and Learning Experience

During my internship at HRsoftBD, I encountered several challenges that contributed to my professional growth and technical development. These experiences enhanced my problem-solving abilities, adaptability, and understanding of real-world software development practices.

- **Creating User-Friendly and High-Quality Interfaces:** Designing interfaces that are both visually appealing and easy to use was a major challenge. Initially, balancing aesthetics and usability was difficult. I overcame this by studying modern UI/UX design principles, analyzing professional designs, and continuously improving my work based on mentor feedback.
- **Ensuring Responsiveness Across Devices:** Making websites adaptable to different screen sizes required careful planning and testing. I addressed this by adopting a mobile-first approach and using Bootstrap along with custom CSS for consistency.
- **Understanding Real-World Project Requirements:** Unlike academic tasks, real-world projects are dynamic and require quick adaptation. I improved by communicating effectively with my mentor, asking questions, and refining my work based on feedback.
- **Managing CRUD Operations and Dynamic Data:** Implementing CRUD functionality in the AZM Zahid website was complex as it involved handling dynamic data. I overcame this by strengthening my JavaScript logic, debugging, and reviewing relevant examples.
- **Software Testing and Debugging:** Testing authentication systems in OMR, hotel management, and payroll software required careful validation and issue detection. I managed this by understanding workflows, testing multiple scenarios, and improving attention to detail.
- **Task Prioritization and Time Management:** Handling multiple tasks simultaneously was challenging. I addressed this by organizing my work, setting priorities, and following a structured approach to complete tasks efficiently.

Overall, these challenges played a crucial role in enhancing my technical skills, problem-solving capabilities, and confidence, preparing me for future roles in frontend development and UI/UX design.

Chapter 5

Methodology

In this chapter, I have detailed the approaches, techniques, and methods used during my internship at HRsoftBD. The methodology describes how various activities were undertaken, how projects were handled, and how feasible solutions were created during the internship period. My work mainly focused on UI/UX design, frontend development, software testing, CRUD operations, and data processing.

5.1 Requirement Analysis Methodology

The initial step before commencing any project or task was to understand the project requirements. I discussed project objectives with my mentor and studied existing systems to determine user needs, design requirements, and technical specifications.

Steps Followed

- Gathered project directions from mentor or supervisor.
- Reviewed reference websites or existing software.
- Identified target users and their needs.
- Established required features and design style.
- Designed workflow prior to implementation.

This approach ensured that the final product aligned with user expectations and organizational requirements.

5.2 UI/UX Designing in Figma

For interface design, I used Figma to create wireframes, layouts, and visual prototypes before development. This helped visualize the structure and user experience of each project.

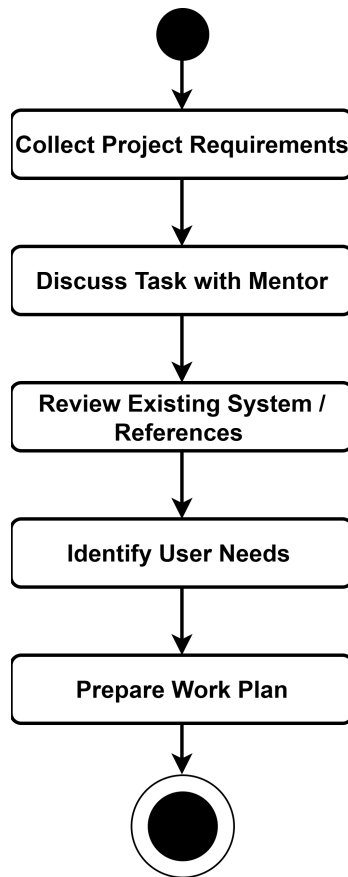


Figure 5.1: Requirement Analysis Methodology

Design Process

- Developed low-fidelity wireframes to plan layouts.
- Selected color schemes, typography, and spacing systems.
- Designed high-fidelity user interfaces.
- Focused on usability, simplicity, and modern design trends.
- Improved designs based on mentor feedback.

Projects Designed

- Interactive Product-card UI
- Home page of E-commerce-based website
- Prototyping/animation-based web page
- Interactive food ordering UI

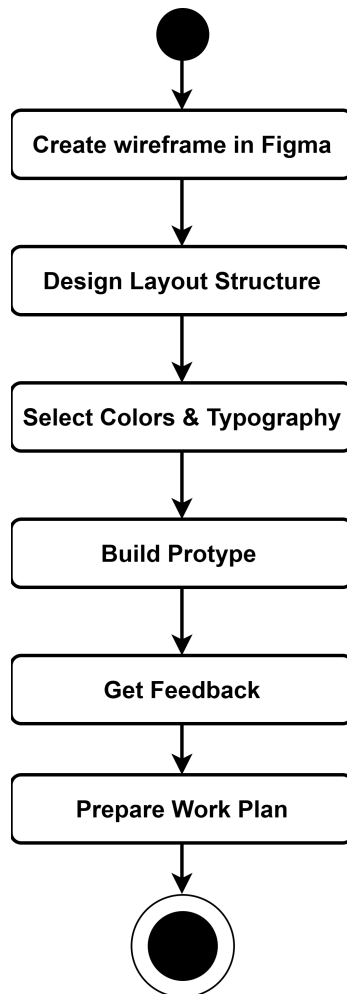


Figure 5.2: UI/UX Design Methodology

This approach minimized development errors and ensured design consistency.

5.3 Frontend Development Methodology

During my internship, I created some responsive website interfaces using frontend technologies such as HTML, CSS, JavaScript, React, and Bootstrap.

Development Approach

- Structured page layouts using HTML.
- Applied styling with CSS and Bootstrap.
- Added interactivity using JavaScript.

- Used React for component-based development.

Development Projects

- News Magazine Website
- Quiz Application
- Home Decor Website
- Mood web Interface
- Smart Pizza Website

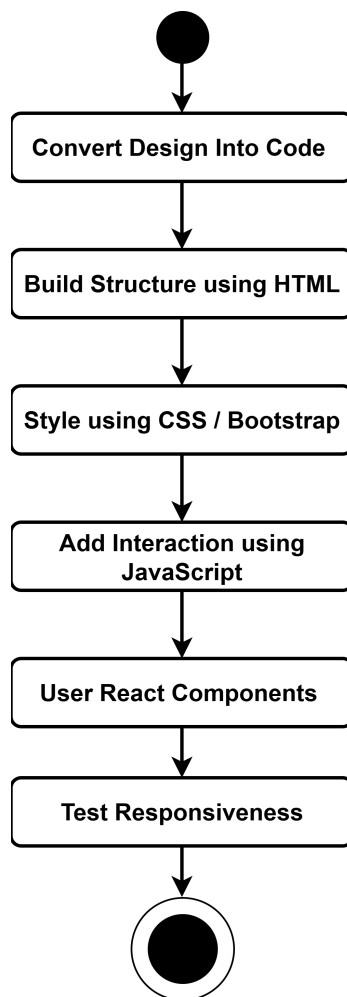


Figure 5.3: Frontend Development Methodology

This approach resulted in a clean code structure and improved user experience across devices.

5.4 Tracker Software Analysis and Improvement Methodology

One of the significant tasks during the internship was working on the Tracker Software. In this task, I analyzed the system, manually tested its functionalities, identified bugs, and provided recommendations to improve the overall user experience.

Work Performed

- Examined the layout and usability of the user dashboard.
- Manually tested features and workflows.
- Identified bugs, UI inconsistencies, and navigation issues.
- Evaluated design clarity and user interaction.
- Suggested improvements in charts, layout structure, and data presentation.
- Recommended better spacing, alignment, and visual hierarchy.

Method Used

- Observed user interaction with the dashboard.
- Tested each feature step-by-step.
- Recorded issues encountered during testing.
- Discussed findings with mentor or team members.
- Proposed improved designs based on feedback cycles.

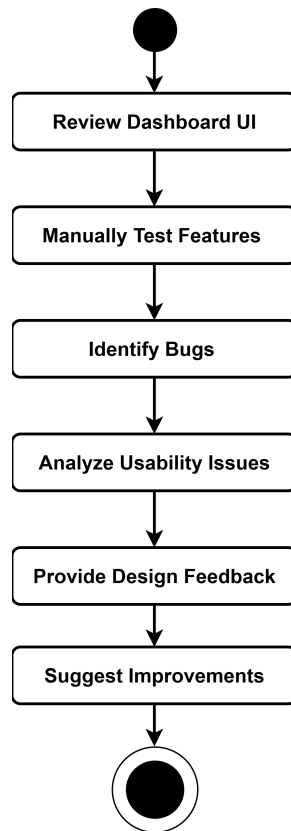


Figure 5.4: Tracker Software Analysis Methodology

This approach helped enhance my skills in usability analysis, software testing, and real-world problem-solving.

5.5 CRUD Operation Methodology

In the AZM Zahid website project, CRUD (Create, Read, Update, Delete) operations were applied to manage dynamic content.

Process Followed

- Created forms for data entry.
- Displayed records in a structured format.
- Updated information when required.
- Deleted records securely.
- Authenticated user data before submission.

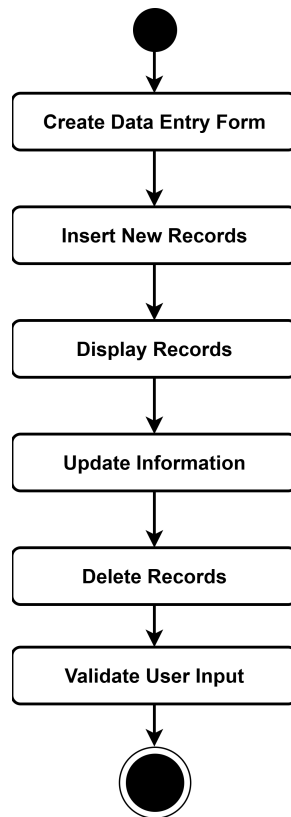


Figure 5.5: CRUD Operation Methodology

This approach provided practical experience in managing dynamic data within web systems.

5.6 Software Testing Methodology

Testing was an essential part of the internship. I was involved in testing authentication systems and overall software usability.

Systems Tested

- OMR Software
- Hotel Management System
- Payroll Website

Testing Process

- Tested login and logout functionality.
- Validated username and password authentication.
- Checked access permissions.
- Identified UI and navigation issues.
- Reported bugs and inconsistencies.

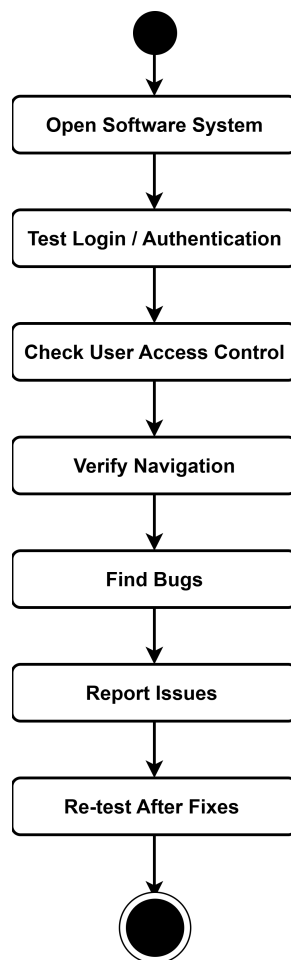


Figure 5.6: Software Testing Methodology

This process enhanced my understanding of software reliability and quality assurance.

5.7 Feedback and Improvement Methodology

Throughout the internship, I received regular feedback from mentors, which helped improve my work quality.

Process

- Presented completed tasks to mentor.
- Received feedback and suggestions.
- Revised designs or code accordingly.
- Re-tested after modifications.

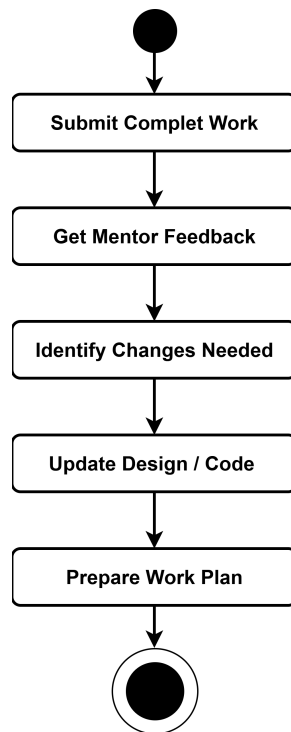


Figure 5.7: Feedback and Improvement Methodology

This iterative process improved both my technical skills and professional communication.

5.8 Summary

The overall methodology followed during the internship included planning, designing, development, testing, and continuous improvement. These strategies enabled efficient task completion and provided valuable practical experience in frontend development and UI/UX design.

In conclusion, the internship enhanced my ability to work in a professional software environment using structured approaches and real-world development practices.

Chapter 6

Analysis and Findings

6.1 Results/Findings

This chapter presents the key findings and conclusions derived from my internship at HRsoftBD. The internship provided hands-on experience in frontend web development, UI/UX design, and software testing. Through various assigned tasks and projects, I developed technical skills, improved problem-solving abilities, and gained a clear understanding of professional software development practices.

6.2 Results Achieved

The internship produced several positive outcomes, both technical and professional:

- **Frontend Development Skills:** Gained hands-on experience in developing responsive and interactive web interfaces using HTML, CSS, JavaScript, React, and Bootstrap. Improved understanding of page structure, styling, and component-based development.
- **UI/UX Design Skills Improvement:** Developed skills in wireframing, prototyping, layout design, typography, spacing, and color selection using Figma. Learned to design modern and user-friendly interfaces.
- **Successful Project Delivery:** Completed several projects:
 - Home Decor Website
 - Mood Web
 - Smart Pizza Website
 - News Magazine Website
 - Quiz Application
 - AZM Zahid Website

- **Hands-On Experience in CRUD Operations:** Learned to implement Create, Read, Update, and Delete operations in a real-world dynamic web system.
- **Exposure to Software Testing:** Performed manual testing on systems such as:
 - Tracker Software
 - OMR Software
 - Hotel Management System
 - Payroll Website
- **Professional Growth:** Improved communication, teamwork, confidence, and understanding of workplace discipline through mentor guidance.

6.3 Key Findings

The following important observations were made during the internship:

- **User-Centered Design is Important:** Interfaces should be simple, clear, and user-friendly, not just visually appealing.
- **Flexibility in Real-World Projects:** Real projects involve changing requirements and deadlines, requiring adaptability.
- **Importance of Software Testing:** Testing helps identify bugs, improve usability, and ensure reliability.
- **Communication Improves Productivity:** Regular communication reduces errors and improves overall project quality.
- **Design and Development Collaboration:** Coordination between UI/UX design and frontend development is essential.
- **Continuous Learning:** Keeping up with new technologies and trends is necessary for professional growth.

6.4 Overall Outcome

Overall, the internship was highly valuable and productive:

- Applied theoretical knowledge in practical scenarios.
- Gained real-world industry experience.
- Learned professional software development processes.
- Prepared for future opportunities in frontend development and UI/UX design.

6.5 Glimpses of my works during internship

6.5.1 UI/UX designs

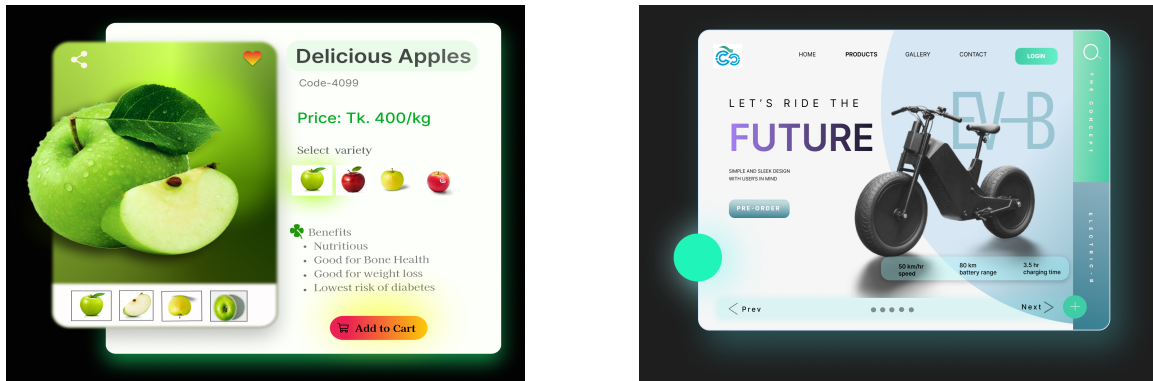


Figure 6.1: Modern Product-card UI



Figure 6.2: Interactive Food Ordering UI

6.5.2 Frontend-based web designs

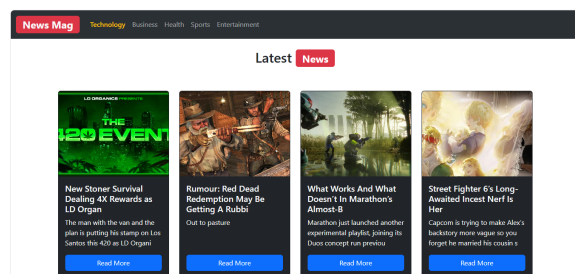


Figure 6.5: API based News Magazine

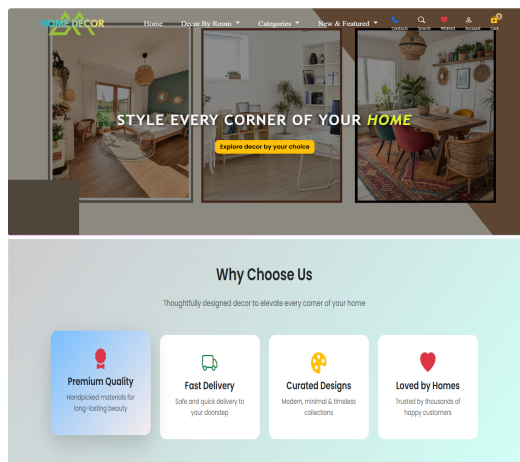
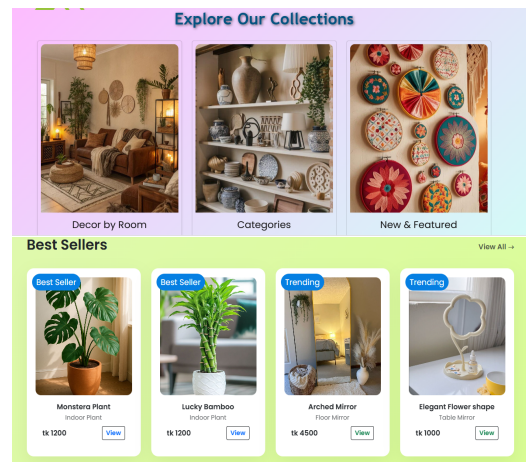


Figure 6.3: Home Decor website

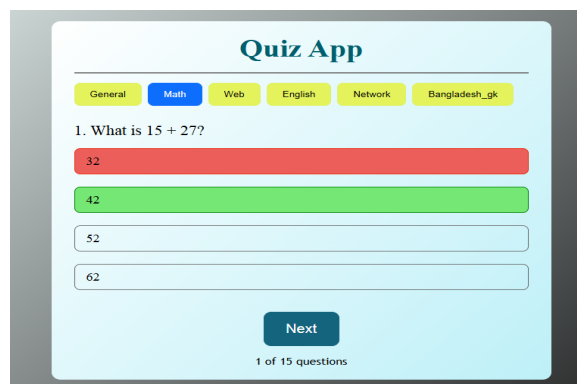


Figure 6.6: React-based Quiz app

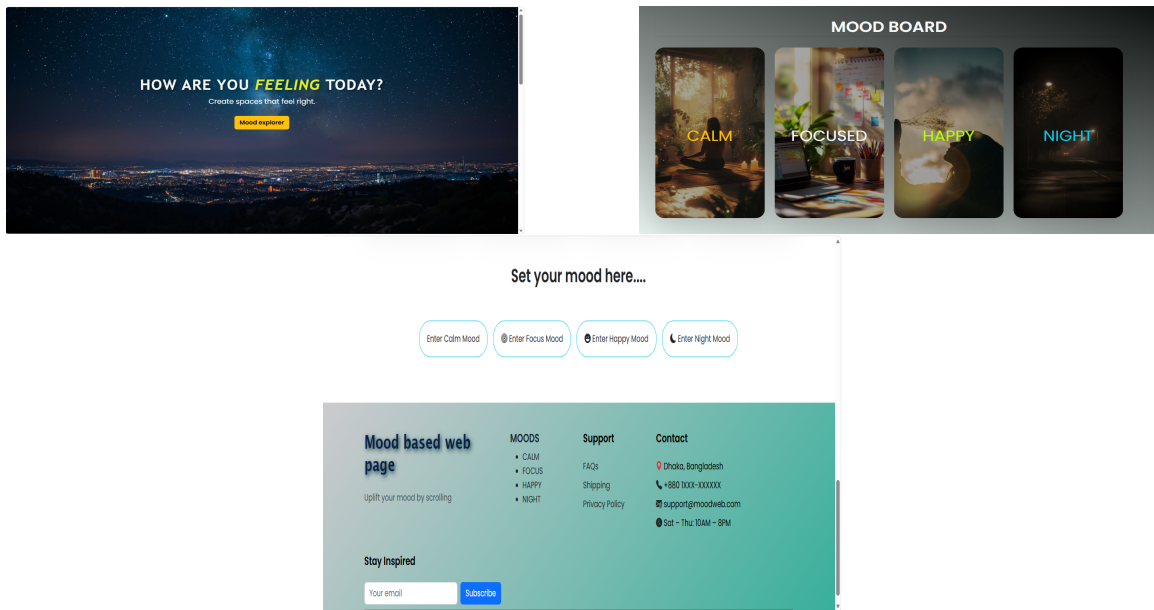


Figure 6.4: Mood-Based website

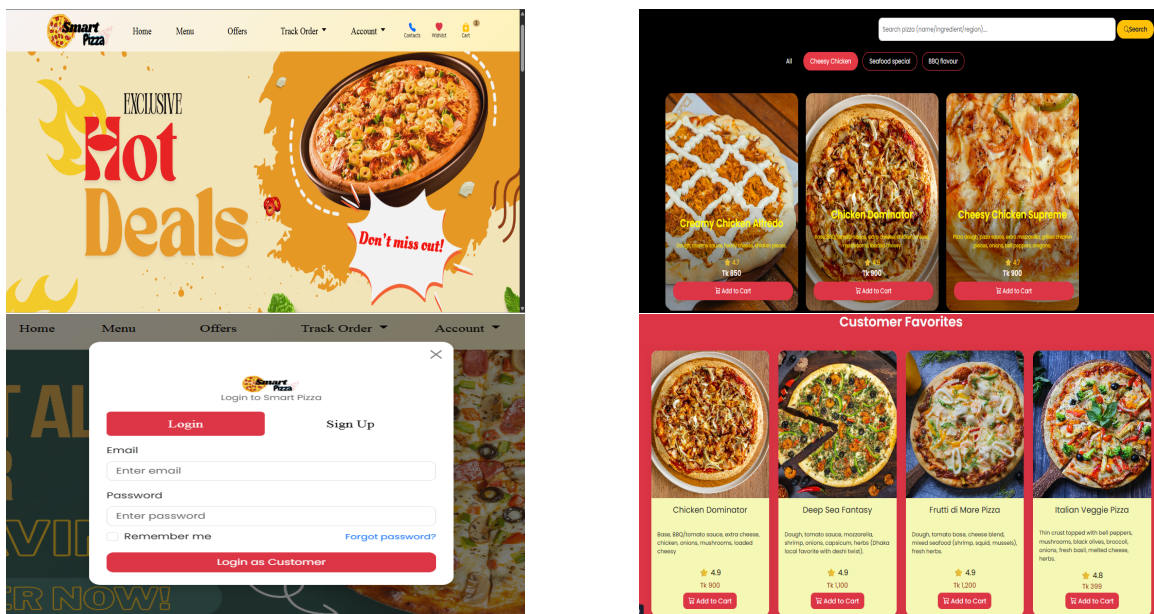


Figure 6.7: Smart Pizza Website

6.5.3 Software Analysis

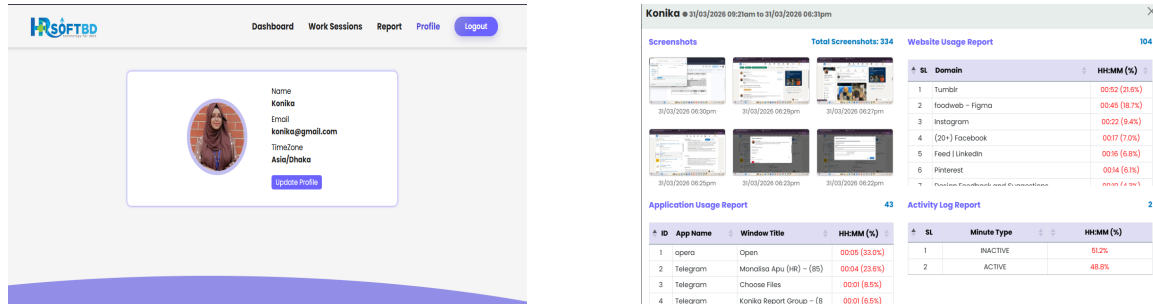


Figure 6.8: Tracker Software

6.6 Learning and Development

The learning experiences during my internship at HRsoftBD contributed significantly to my professional and personal growth. Working in a real software company environment helped me understand industry practices, teamwork, and the importance of continuous improvement. The key lessons learned are as follows:

- **Significance of Workplace:** I learned how a professional software company operates through structured workflows, deadlines, task distribution, and team coordination. This improved my understanding of workplace discipline, responsibility, and time management.
- **Teamwork and Communication:** I realized that effective communication and collaboration are essential for successful project completion. Regular discussions with mentors and team members helped clarify requirements and improve my work based on feedback.
- **Application of Academic Knowledge:** The internship allowed me to apply theoretical concepts from university into real-world projects, especially in web development, UI/UX design, and problem-solving.
- **Importance of User-Centered Design:** I understood that software should be designed based on user needs. Interfaces must be simple, user-friendly, visually appealing, and responsive across devices.
- **Lifelong Learning and Adaptability:** Technology evolves rapidly, and project requirements often change. I learned the importance of being adaptable, quickly learning new tools, and continuously improving my skills.
- **Quality and Testing:** Through manual testing of different systems, I realized the importance of testing in identifying bugs, ensuring security, and maintaining software reliability.

- **Problem-Solving Skills:** I encountered challenges related to design, responsiveness, and debugging. These experiences helped me develop a logical and structured approach to solving problems.
- **Self-Confidence and Professional Readiness:** Working on real-world projects increased my confidence and prepared me for future career opportunities in frontend development and UI/UX design.

Overall Learning Outcome: Overall, the internship at HRsoftBD was a valuable learning experience. It enhanced my technical skills, professional behavior, teamwork ability, and readiness to compete in the modern software industry.

6.7 Tools and Technologies Used

During my internship at HRsoftBD, I used various software tools, technologies, and platforms for frontend development, UI/UX design, testing, and data processing. These tools helped me complete projects efficiently and improve my practical technical skills.

Development Technologies

- **HTML5:** Used to structure web page content.
- **CSS3:** Applied for styling, layout design, animations, and responsiveness.
- **JavaScript:** Used to add interactivity, dynamic features, and form validation.
- **React.js:** Used for building component-based modern web applications.
- **Bootstrap:** Helped create responsive layouts using pre-built UI components.

Design Tools

- **Figma:** Used for UI/UX design, wireframing, prototyping, and interface layout creation.

Testing and Productivity Tools

- **Google Chrome / Microsoft Edge:** Used for browser testing, debugging, and responsiveness checking.
- **Microsoft Excel:** Used for organizing data and converting PDF files into structured formats.

Hardware Used

- Desktop and Laptop
- Internet Connection
- Keyboard and Mouse

Overall, these tools played a significant role in successfully completing my internship tasks.

6.8 User Guidelines

This section provides general guidelines for using the software applications developed or used during the internship.

General Web Application Guidelines

- Use modern browsers such as Google Chrome or Microsoft Edge.
- Ensure a stable internet connection.
- Use the navigation menu to explore different sections.
- Fill out all required forms with valid information.
- Use buttons such as Add, Update, Delete, Search, and Submit properly.
- Enter a valid username and password for login systems.
- Always log out after completing work for security purposes.

Project-Specific Guidelines

- **News Magazine Website:**
 - Select categories such as Sports, Business, or Technology.
 - Click on a news article to view full details.
- **Quiz Application:**
 - Start the quiz and answer all questions.
 - Submit answers to view the final score.
- **AZM Zahid Website:**
 - Admin users can add, update, edit, or delete content.
- **Tracker / Payroll / Hotel Management Software:**

- Log in using valid credentials.
- Access reports and features from the dashboard menu.

These guidelines help users understand the system and improve usability.

6.9 Impact of the Internship

My internship at HRsoftBD contributed significantly to both organizational goals and my personal development.

6.9.1 Contribution to Organizational Goals

- **Improved UI Design:** Designed modern and user-friendly interfaces using Figma aligned with company standards.
- **Support in Web Development Projects:** Contributed to projects such as Home Decor, Mood Web, Smart Pizza, News Magazine, and Quiz Application.
- **System Improvement:** Provided feedback and design suggestions to improve the usability of Tracker Software dashboards.
- **Software Quality Enhancement:** Performed manual testing on OMR, Payroll, Hotel Management, and Tracker Software to identify bugs and issues.

6.9.2 Personal and Professional Impact

- Improved technical skills in frontend development.
- Gained real-world experience in UI/UX design.
- Increased confidence in handling professional projects.
- Enhanced teamwork and communication skills.
- Developed understanding of professional software development processes.

Overall, the internship helped me contribute to HRsoftBD's mission of delivering quality digital solutions while preparing me for future opportunities in frontend development and UI/UX design.

Chapter 7

Conclusion, Limitations, and Recommendations

7.1 Conclusion

My internship experience at HRsoftBD was highly rewarding and contributed significantly to my academic, technical, and professional growth. It provided me with the opportunity to apply theoretical knowledge gained during university in a real-world working environment and understand practical aspects of the software industry.

Throughout the internship, I was involved in various activities including UI/UX design, frontend development, software testing, CRUD operations, and data processing. I worked on several projects such as:

- Home Decor Website
- Mood Web
- Smart Pizza Website
- News Magazine Website
- Quiz Application
- AZM Zahid Website

Additionally, I contributed to improving the Tracker Software by providing feedback on design, usability, and identifying bugs through manual testing.

This experience strengthened my practical knowledge of HTML, CSS, JavaScript, React, Bootstrap, and Figma. It also improved my problem-solving ability, teamwork, communication skills, and confidence in handling real-world projects. I gained a clear understanding of how software systems are designed, developed, tested, and improved in a professional environment.

Overall, the internship successfully bridged the gap between academic learning and industry practices. It prepared me for future career opportunities in frontend development and UI/UX design while giving me valuable exposure to workplace culture and responsibilities.

7.2 Limitations

Despite the valuable learning experience, there were some limitations during the internship:

- The duration of the internship was relatively short, limiting exposure to more complex projects.
- Limited involvement in backend development and database management tasks.
- Time constraints restricted deeper participation in all phases of some projects.
- Minimal exposure to client meetings and direct communication processes.
- No involvement in advanced deployment or production server management.

However, despite these limitations, the internship provided meaningful practical experience.

7.3 Recommendations

Based on my experience, the following recommendations can help improve the internship program:

Suggestions to the Organization

- Provide structured training sessions at the beginning of the internship.
- Allow interns to participate in full project life cycles (planning, development, testing, deployment).
- Organize regular skill development sessions on modern technologies and UI/UX trends.
- Encourage intern participation in team meetings and client discussions.
- Maintain proper project documentation for easier learning.
- Strengthen mentorship and feedback systems.

Recommendations for Future Interns

- Build a strong foundation in HTML, CSS, JavaScript, and tools like Figma.
- Be proactive in asking questions and seeking feedback.
- Manage time effectively and stay disciplined.
- Treat every task as a valuable learning opportunity.

7.4 Final Remark

In conclusion, my internship at HRsoftBD was an excellent learning experience that enhanced both my technical and professional skills. With improved structure and additional learning opportunities, the internship program can become even more beneficial for future students.

Chapter 8

Acknowledgement

I would like to express my sincere gratitude to HRsoftBD for providing me with the opportunity to complete my internship in a professional and supportive working environment. This experience has been highly beneficial in enhancing my practical skills, technical knowledge, and professional confidence.

I am especially thankful to my internship supervisor and mentor for their continuous guidance, encouragement, and constructive feedback throughout the internship period. Their support helped me improve my understanding of frontend development, UI/UX design, software testing, and professional workplace practices.

I would also like to thank all the team members and colleagues at HRsoftBD for their cooperation, friendliness, and willingness to share their knowledge and experience. Their support made my learning journey enjoyable and effective.

I am deeply grateful to the faculty members of my university for their academic guidance and for providing this internship opportunity as part of my academic program.

Finally, I would like to thank my family and well-wishers for their constant encouragement, patience, and support, which motivated me throughout my internship.

In conclusion, I sincerely appreciate everyone who contributed to making this internship a valuable and successful experience.

Appendix

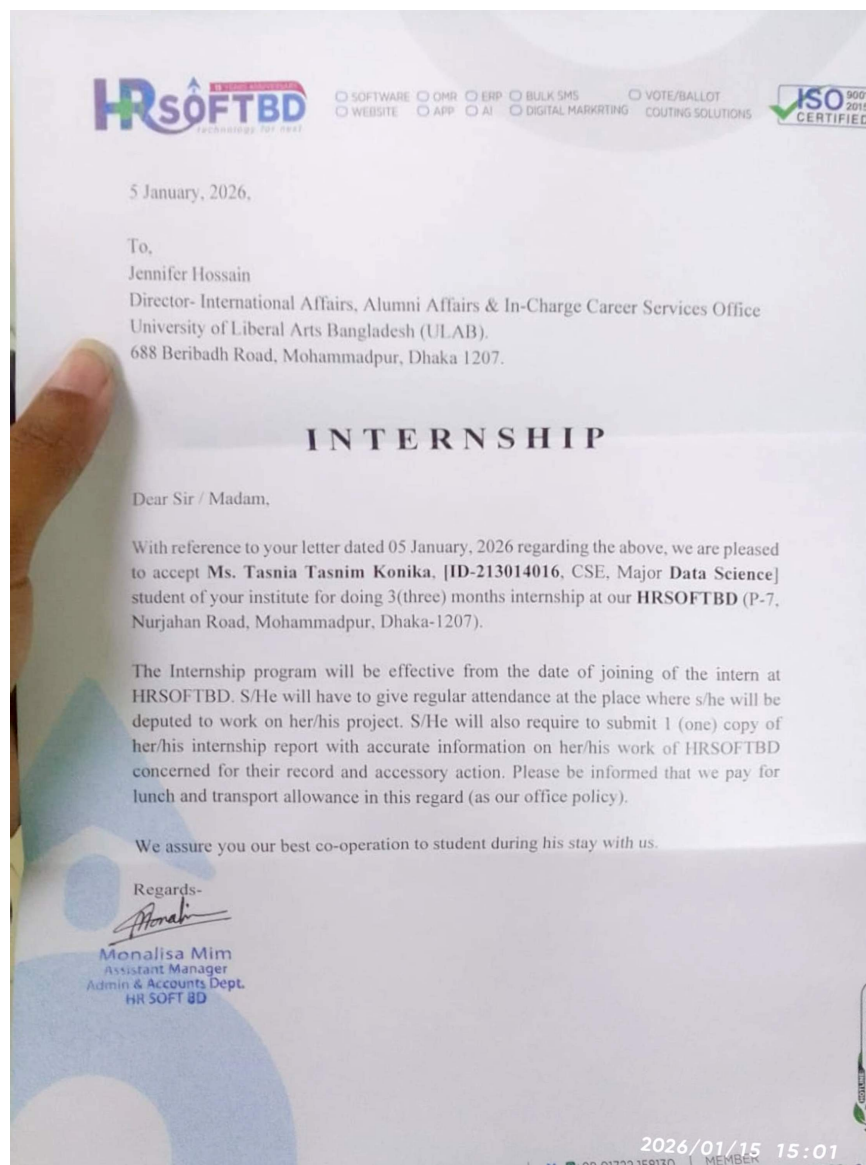


Figure 8.1: Appointment Letter

References

HRSOFTBD. (2025a). *About us*. <https://hrsoftbd.com/site/about>. (Accessed: 2026-04-13)

HRSOFTBD. (2025b). *Mission and vision*. <https://hrsoftbd.com/site/mission>. (Accessed: 2026-04-13)