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An Undergraduate Internship on Website Development of Abira International

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An Undergraduate Internship on Website Development of Abira International

By

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Autumn,2022

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January 31,2023

Dissertation submitted in partial fulfillment for the degree of
Bachelor of Science in Computer Science

Department of Computer Science & Engineering

Independent University, Bangladesh

Attestation

This is to certify that the report titled "Abira International" was completed by me, Abdullah Al Nayem (ID - 1820507) submitted in fulfillment of the requirement for the Degree of Computer Science from Independent University, Bangladesh (IUB). It has been completed under the guidance of Ajmiri Sabrina Khan (Internal Supervisor) and Omar Faruk (External Supervisor). I also certify that all my work is original and has not been submitted earlier to this university or any other institution. All the sources of information used in this Project Report has been duly acknowledged in it.



Signature

31-01-2023

Date

Abdullah Al Nayem

Name

Acknowledgement

I would like to start by thanking Almighty Allah for His blessings and for providing me with the capacity to work hard and the chance to complete this report. I'd like to express my gratitude to Ajmiri Sabrina Khan, Lecturer, Department of Computer Science Engineering, Independent University of Bangladesh, for her constant assistance and advice, which enabled me to successfully finish my project and report.

I would also want to thank everyone who provided information, ideas, and recommendations to assist me to prepare this report. My gratitude goes to the Department of Computer Science and Engineering at Independent University Bangladesh for assisting me in gaining necessary information and skills during my Bachelor's degree in CSE.

My heartfelt gratitude goes to MD. Omar Faruk, CTO of Pridesys IT Ltd, for providing me with the chance to serve as an intern with Pridesys IT Ltd. My time in Pridesys IT Ltd was nothing short of fantastic, and I greatly liked working and studying here. I would want to thank all of my colleagues in Pridesys IT Ltd for welcoming me into their team and providing continual assistance to complete my project and report It would not have been possible without them.

Finally, I would want to thank Independent University Bangladesh, as well as all of the respected faculty and staff members who were an integral part of my bachelor's degree in CSE. All of what I've done has been made possible exclusively by their direction and assistance, and I convey my appreciation to them.

Letter of Transmittal

January, 2022
Ajmiri Sabrina Khan
Lecturer
Department of Computer Science and Engineering,
Independent University, Bangladesh (IUB)
Bashundhara R/A, Dhaka 1229, Bangladesh.

Subject: Report submission of the internship.

Dear Madam, with great respect and dignity, I would like to submit my Partial Internship report in order to complete my Bachelor of Computer Science and Engineering degree. This report is based on my internship experience at Pridesys IT Ltd, which began on September 15th, 2022 and continues to this day. As a Website Developer intern, I was assigned to A project.

I worked in Pridesys under the direction of MD. Omar Faruk, Team Lead of Development. This report is based on my Pridesys project. I was assigned to the project Abira International website, where I worked as the web developer. The major goal of the internship is to study and gain information, to improve our abilities, and to receive our first experience of the corporate world.

I hope and wish that this report is comprehensive and meets your expectations. I have done my best to prevent flaws and hope that my report will be of excellent standard. I would also want to thank you for providing me with the chance to submit my report.

Sincerely,
Abdullah Al Nayem
ID 1820507

Evaluation Committee



Signature

Sanzar Adnan Alam

Name

Internal Examiner-1 / Panel Member-1



Signature

Sarwar Shahidi

Name

External Examiner-2 / Panel Member-2

Signature



Name

Ajmiri Khan

Supervisor of the Intern

Signature



Name

Dr. Mahady Hasan

Head, Department of Computer Science & Engineering

Abstract

Bangladesh has been emerging as a digital nation, with a large number of people utilizing the internet and the number continues to grow. The internet is now widely available and has touched every part of the country. This necessitates the evolution and digitization of businesses, platforms, and organizations. This creates a big potential for businesses to market themselves online. Abira International, like every other company sector, has seized this chance to expand their operations and attract a broader audience. Pridesys has teamed with a couple of major firms to assist them in developing their online platform to market their business and raise the value of their brand. The following report is based on the building of a website for such a firm, Abira International. The website's goal is to provide essential information to customers and potential consumers, showcase products, as well as an easy way to contact or organize a meeting, and to promote the brand to the local community in order to establish them as a notable fabric producer. The report also describes my internship experience with Pridesys IT Ltd, a well-known digital agency based in Dhaka, Bangladesh. I am glad to join them and work with them in the development team as a front-end developer intern.

The report is divided into nine sections that provide an overview of the project and the development process. It starts with an introduction to the project in the first chapter, which focuses on the project's overview and goal, as well as the scopes of work we had. The second chapter discusses the literature review and how the project ties to my bachelor's degree. In the third chapter, I discussed project planning, project management, and finance, which included a breakdown of time, resources, and cost to continue development. The fourth chapter then explains the project strategy and how that methodology benefited us in planning and development. The fifth chapter, titled "body of the project," is the most important component of the report. The system analysis is covered in detail here, with an emphasis on various analytical approaches and visualizations. The following chapter, Results and Analysis, describes the development process's outputs and analyzes what we did. The seventh chapter covers the project's long-term feasibility, social and environmental implications, and ethical concerns. Chapter eight is devoted to going over the problems I ran across during this period and how I solved them. Finally, in the final chapter, I highlighted the scope of future work as part of the report's conclusion.

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Chapter 1

1 Introduction

1.1 Background of the Work

In today's world a website is becoming a necessity for any kind of company. Nowadays people spend more time on the internet for any kind of information or knowledge. If a company has a good website then people start to acknowledge that company more, compared to having an official page in social media platforms. A good-looking clean website also increases the Brand value of the company. The project that I am working on is a website for a startup company which makes different fabric for RMG sector of Bangladesh. Most of the these RMG products are exported throughout the world. Hence it is important for this company to create a good website which can enhance the brand value of their company. The website will provide all the necessary information about the company to its users in the About Us and Contact Us section which will cover their Mission and Visions, and a way to send them an email or their contact information including a google map location of their address. It will also showcase all of their manufactured products in the Gallery section. It will also contain picture of manufacturing process of their products.

1.2 Objectives

The objective of this project is to enhance their Brand value by allowing customers from all across the world to see their products and contact them for their products. This website will also enhance its online presence to compete with their competitors. Customers from all across the world can view their products and contact them to set a meeting for any kind future business or visit them directly in their office. Also, this website is going to be a responsive website for users can use it from any smart devices which has access to the internet.

1.3 Scopes

During the development of this website some of the feature that will be available for the users are given below:

- Home page
- Contact Us page
- About Us page
- Gallery page
- Product Archive Page

Chapter 2

2 Literature Review

2.1 Relationship with Undergraduate Studies

Database Management: This course taught me the first basics of developing a web page and how to work with its database. This course gave me the in-depth knowledge of Rich Picture, ERD relations, Normalization and SQL writing process which is required to connect and interact with the database of a website.

System Analysis and Design: This course provided a basic knowledge of understanding the customer need and how to deal with a customer. It also taught me of the Software Development Life Cycle, which assisted me in planning all of the project's processes and phases. It aided me in determining my objectives and difficulties. Through the seven steps of SDLC analysis, we created a strategy that simplified my job while working on the project.

Web Application: This course taught me all of the this that is required to make a complete functioning website. I learned different languages like HTML, CSS, JS, Bootstrap PHP and many small tricks and shortcuts which helped me to working in this project more efficiently.

2.2 Related Works

In the last decade website development for successful companies has been a new trend. Having a presence in Internet world through a good functioning website has become a necessity for successful old and new startup companies. The organization I am doing my internship in is known for many of their collaboration with many renowned companies. Let me mention some of their highlighted projects of reputed company.

- Design & Development of Dealer Management System Software for Teletalk.
- Development of Dynamic Website of Case Management System for Bangladesh Press Council.
- Design and Develop the Knowledge and Learning Platforms for PIU-DLS.
- Ananta Group (Ongoing)
- Panorama Apparels LTD (ongoing)

Chapter 3

3 Project Management and Financing

3.1 Work Breakdown Structure

Breakdown of Work Structure or WBS can be defined as a deliverable-oriented hierarchical decomposition of the work to be executed by the project team to accomplish the project objectives and create the required deliverable. It organizes and defines the total scope of the project.

It organizes and establishes the project's overall scope. Each WBS level denotes a more precise definition of the work required to finish the project. For our WBS A top-down approach and a phase-based WBS were used. Let me give a short description of how the stages are implemented:

Requirement Analysis: We sit with the client and understand and gather their requirements and demands. The we make a work schedule and make a rough cost estimation for the project. If the client agrees with the cost estimation then we move to the designing part.

Design Layout: Rich picture diagram, Activity diagram, ERD and UML diagrams are made based on the clients agreed requirement and we take the conformation again with the client to see if all of their requirements are fulfilled.

Development: We first do the front-end design and then connect the front-end design with the back end. There are additional phases after that including several quality assurance meetings. In this phase we make the website responsive and interactive. The we enter some trial data to check the performance along with many other quality control checks and bug fixing.

User Acceptance Testing: In this process the website is made online for trail run. In this trial run the site is tested and many small problems are fixed and the overall website performance is improved. There are several of these UAT runs required to optimize the website for the users.

Deployment: The website is fully deployed live for the client when all the requirements of our clients are fulfilled.

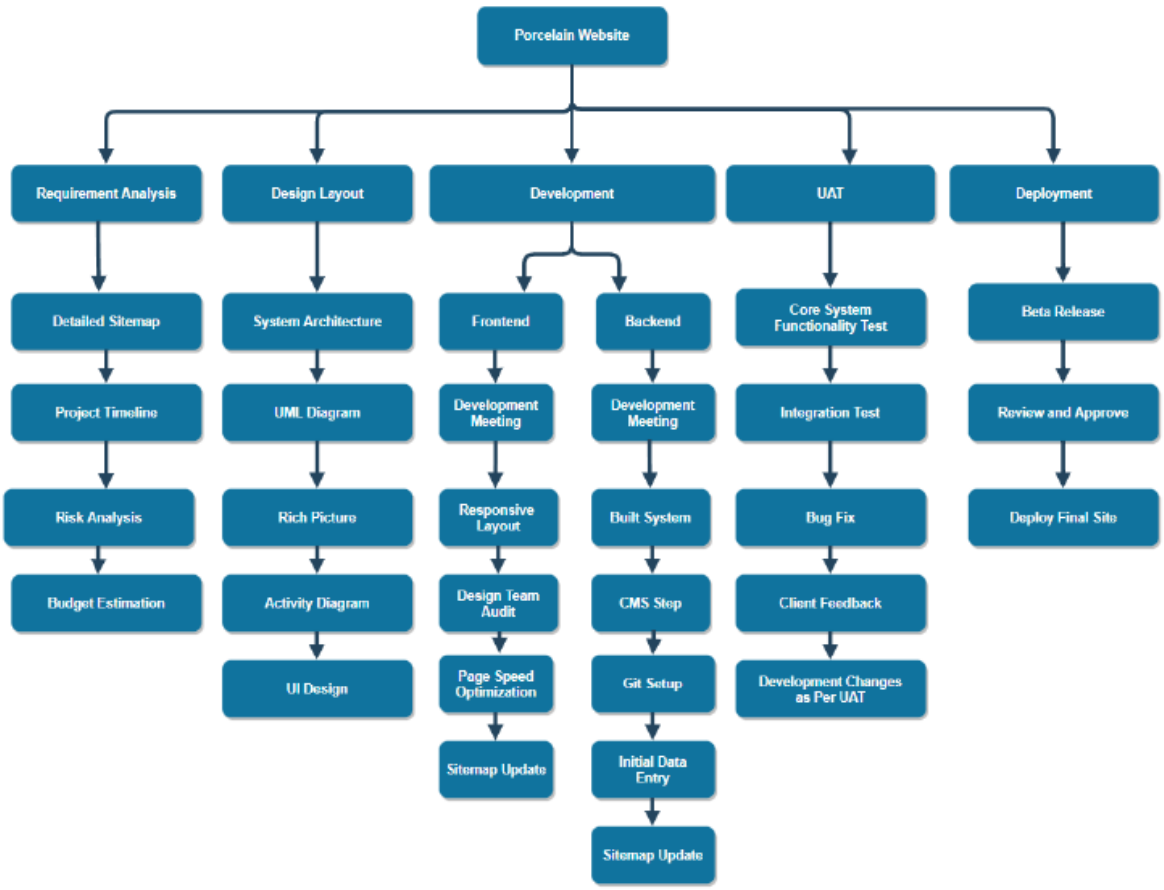

Figure 3.1: Work Breakdown Structure

3.2 Process wise Time Distribution

The time required to make a website mainly depends on the complexity of the website. The more complex a website is the longer it takes to develop the project. For this project we have set the time to 90 working days to complete the project.

The entire task is separated into five core functions, all of which accounts for 100 percent of the overall effort. The five core functions are:

Requirement Analysis: First we have a meeting with the client to understand their requirements including functional, design and security. As our client is a garment fabric manufacturing company so we take permissions to visit their office and factory to understand their working process better. This process approximately takes 15 days.

Design Layout: Based on the gathered information, UI/UX design is completed in Adobe XD, and a high fidelity or mockup is made to show the customer how the site would look, which is one of many versions that change after customer feedback. Which takes around 15 working days.

Development: In the development section the front-end is done firstly. After the front-end basic structure is made, the backend development begins. The designing and development process are collaborated to meet the clients demands. This process is the longest among all stage of development and it takes around 35 days.

User Acceptance Testing (UAT): After the development phase is completed, the client is presented with the project in a meeting. All of the process of the project is displayed and demonstrated to the client. The clients are then asked for specific feedback as they could not ask for any extra modification that was not described on the SOW and Cost Specification report, and the project is updated in response to their feedback. Quality assurance is also done during this period which is very crucial. This takes around 15 working days.

Deployment: Finally, after getting a go from the customer, the project is hosted on the client's domain and hosting. The CMS is handed over to the client as well as a week of training on how to manage it and it is mandatory for every client in almost all the projects. This takes around 15 working days.

3.3 Gantt Chart

A Gantt chart is a bar chart that shows how project tasks are scheduled across time. Gantt chart is a handy tool for project planning since it shows what work is scheduled to be done on various days. It allows project managers and team members to see the start, end, and milestone dates of a project timeline in a single stacked bar chart. A Gantt chart's vertical axis represents the tasks to be done, while the horizontal axis indicates the project timeline. Just like any other project, to help us plan and organize all of the project's activities in detail, we built a Gantt Chart. The project is expected to be completed in three months at 90 working days.

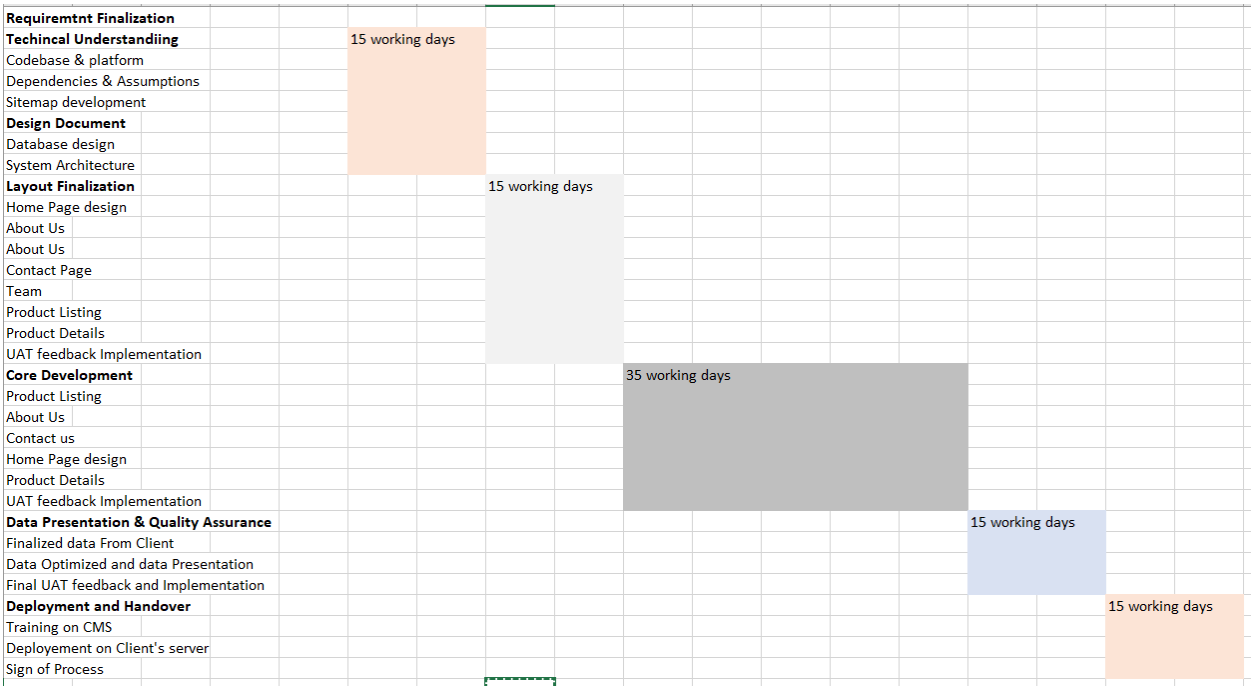

Figure 3.2: Gantt Chart

3.4 Process/Activity wise Resource Allocation

The project is expected to take around 60 working days to complete in three months. The project is being worked on by a total of 3 people.

- Project Management: 1 Project manager
- Design, Development and client handling: 2 employees

3.5 Estimated Costing

A web app's cost is decided by several factors. There are some common factors like the modules, website design or any additional features desired by the customer. Also, the size of the project is unique every time. For better understanding I have included a table below that shows our estimated pricing for design services such as theme, logo, and icons, as well as the cost of a custom home page slider, social network connection, SSL Certificate, SEO, and other plugins. The base cost, including domain and hosting, was estimated to be BDT 1,30,000 BDT for the project. But, after customer feedback during the development phase or after the launch, clients may require additional features which will add to the total cost.

Work Distribution	Cost(BDT)
User Expewrience & Interface Design	25000
Web Module & Functionality Development	75000
Web Hosting Maintenance Service	30000
Total	130,000

Figure 3.3: Estimated costing

Chapter 4

4 Methodology

The systems development life cycle is a phased approach to solving business problems Developed through the use of a specific cycle of analyst and user activities. Each phase has unique user activities. Out of many great methodologies we chose Agile methodology.

The Agile software development technique is one of the most straightforward and efficient methods for integrating an idea for a business need into software solutions. Agile software development methodologies involve continuous planning, learning, improvement, team participation, evolutionary development, and early delivery. It promotes adaptability scope of change.

The basic principles of Agile methodology are,

• Satisfy the consumer by delivering functional software.

• Accept change, especially if it is introduced late in the development process.

• Continue to build functional software in small increments and on a regular basis.

• Encourage customers and analysts to collaborate on a regular basis.

• Adopt agility while paying close attention to mindful development.

We chose agile so that we can respond quickly to changes in developments or client input without deviating from the original plans. ” Just enough” planning and delivering in tiny, regular increments will allow the team to obtain feedback on each modification and integrate it into specific prospects at a low cost. An agile team gathers around a common vision and then brings it to life in the way they believe is best. Each team establishes its own quality, usability, and completeness requirements. Their ”definition of done” determines how quickly they will complete the task. Although it may be frightening at first, firm leaders have discovered that when they place their faith in an agile team, the team feels a higher sense of ownership and rises to meet management’s objectives.

Chapter 5

5 Body of the Project

5.1 Work Description

Abira International was created in 2019 by a very experienced guy who has been working in the fabric industry for many years. Although he has many partnership companies before, but this is the first time that he has a created a company of his own. As the company mostly deals with foreign buyers, hence they decided to many a company website so that any interested buyers can go through their website and see the types of fabrics that they produce and contact them if they want to order or set a meeting for further inquiries. The core functionality of the website was to showcase the numerous fine fabrics to the world. Anyone visiting the website can contact the company through the contact form for any customer service.

My job in this project was to build the web application focusing on the frontend developing, system designing and building some parts in the backend part. The first few weeks went past by to understand and adapt to the new environment. The website is built with HTML, CSS, JQuery, JavaScript, PHP, MySQL.

5.2 Requirement Analysis

Requirement Analysis is the process of defining user expectations for a new website being built or modified. It is sometimes referred to loosely by names such as requirements gathering or requirements capturing. Requirements analysis encompasses those tasks that go into determining the needs or conditions to meet for a new or altered product or project, taking account of the possibly conflicting requirements of the various stakeholders, analyzing, documenting, validating and managing software or system requirements. There are few ways to do requirement analysis and for our project we went with the questionnaire and interview process.

5.3 System Analysis

The process of monitoring systems for diagnostic or development reasons is known as systems analysis. The main purpose of system analysis is to understand how the system works in its most distilled component form and then to solve any problems that exits and make the system more effective and efficiently to produce the desired outcome.

5.3.1 Six Element Analysis

	Human	Non Computing Hardware	Computing Hardware	Software	Database	Network
Create Projects	Admin	Pen, Paper	Computer	Web Browser	MySQL	WAN/LAN
View Projects	User	N/A	Computer/	Web Browser	MySQL	WAN/LAN
Update Projects	Admin	Pen, Paper	Computer	Web Browser	MySQL	WAN/LAN
Delete Projects	Admin	N/A	Computer	Web Browser	MySQL	WAN/LAN
Submit Form/Queries	User	N/A	Computer/ Mobile	Web Browser	MySQL	WAN/LAN
Manage Forms/Queries	Admin	N/A	Computer	Web Browser	MySQL	WAN/LAN

Table 5.1: Six Element Analysis

5.3.2 Feasibility Analysis

Feasibility Analysis is the study to understand the desirability and practicality of this project. The purpose of feasibility analysis is to provide information to the company on whether or not they should pursue the course of action. Before investing time and money in a project, any corporation might have the urge to know how successful the initiative will be. With regard to input pricing, it is critical that businesses understand, even before committing to time and other resources to the project, how much it would cost to proceed with their product and whether that cost can be earned with the use of this website.

Five feasibility studies are conducted for the project, which are discussed below:

1. **Technical Feasibility:** Pridesys is a very well-established organization that has worked with some of the industry's biggest names. They have the required talents to bring the project's vision to reality. This project is technically possible since all of the necessary hardware, software, and other technical requirements are on hand.

2. **Economic Feasibility:** Economic feasibility is a kind of cost-benefit analysis of the examined project, which assesses whether it is possible to implement it. This term means the assessment and analysis of a project's potential to support the decision-making process by objectively and rationally identifying its strengths, weaknesses, opportunities and risks associated with it, the resources that will be needed to implement the project, and an assessment of its chances of success.

3. **Legal Feasibility:** Before beginning this project, all legal constraints, such as data protection legislation, social media rules, and government restrictions, were assessed to guarantee that it does not meet any legal constraints in the future.

4. **Operational Feasibility:** Nowadays more and more people are connected to the digital world in almost every aspects of their life. And since the Covid-19 pandemic people are even more reliable on online platforms to do their works. Because of this website, visitors and overseas clients may now quickly and easily find all of the information they need to make decisions accordingly.

5. **Schedule Feasibility:** Scheduling feasibility is done by organization to estimate how much time the project will take to complete. This is the most critical assessment for project success. We assume the length of time it will take to finish a project in scheduling feasibility which in this case is 90 working days and some room for flexibility. We believe that the project will be completed on time as given milestones are being accomplished accordingly.

5.3.3 Problem Solution Analysis

When I started the internship, it was a little hard to get adapted to the new environment and the work life. As this project was my first real client-based project, so I was a little bit confused and overwhelmed by the whole thing. It took some time for me to adapt to the working environment. Before this project, I only did web project for my course using basic knowledge and bit of self-taught process. For this project I had to relearn to code HTML, CSS and Bootstrap alongside learning JS and jQuery. I had very little experience on jQuery and JavaScript. I am still learning new things from my seniors in the job. One of the main problems was to make the website all platform responsive. I am still learning to deal with problems as I am still learning many things, so it might take some time to perfect my capabilities. It takes self-learning with the help of online sources, although my seniors are helpful but they don't have the time to teach me all the problems that I face. And I think it is a well equipment to self-learn because that makes you independent from others.

5.3.4 Effect and Constraints Analysis

Before building any project, it is important to understand and keep in mind some constraints. Some of those constraints are for example, budget, deadline, unique design and features etc. for this project the main constraints were budget, deadline and design. As I'm new to this corporate world, it takes more time for me to figure out problems and their solutions. For me it's a trial and error process. That's why deadline is an important constraint to keep in the back of the mind while doing the project. Budget is also important to keep in mind as we can't use exceedingly more resources for this project as the budgets is limited.

For any website development we always have to keep in mind the end users. Each client is unique in their own way. Before we begin designing, we must do research and have a knowledge of our target audience. Our design should be a wonderful experience for the customer, not for us. For this we always have to make our customers happy, and hence meet their demands, we have to change the design many times.

5.4 System Design

5.4.1 Rich Picture

A Rich Picture is a way to explore, acknowledge and define a situation and express it through diagrams to create a preliminary mental model. Any approach may be used to build a rich image, and it can be applied in any scenario, regardless of its complicity. We created a rich picture to create a model to map the significant journey of different kind of users.

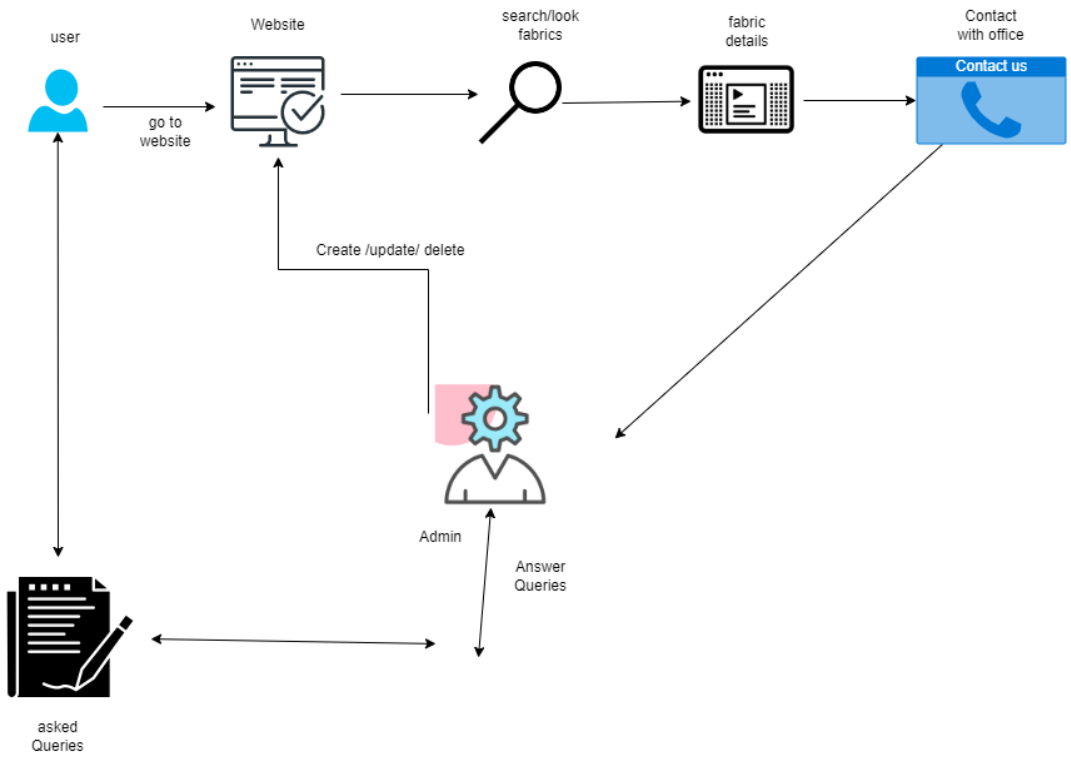

Figure 5.1: Rich Picture

5.4.2 UML Diagram

The Unified Modeling Language (UML) is a general-purpose, developmental modeling language used in software engineering that is designed to give a standardized way to represent a system's architecture.

Use Case Diagram: A use case diagram is a method of summarizing information about a system and its users. It is often depicted as a graphical representation of the interactions between various parts in a system. Use case diagrams define the events in a system and how they flow, but they do not describe how those actions are implemented. Figure below shows the use case of a user and an admin.

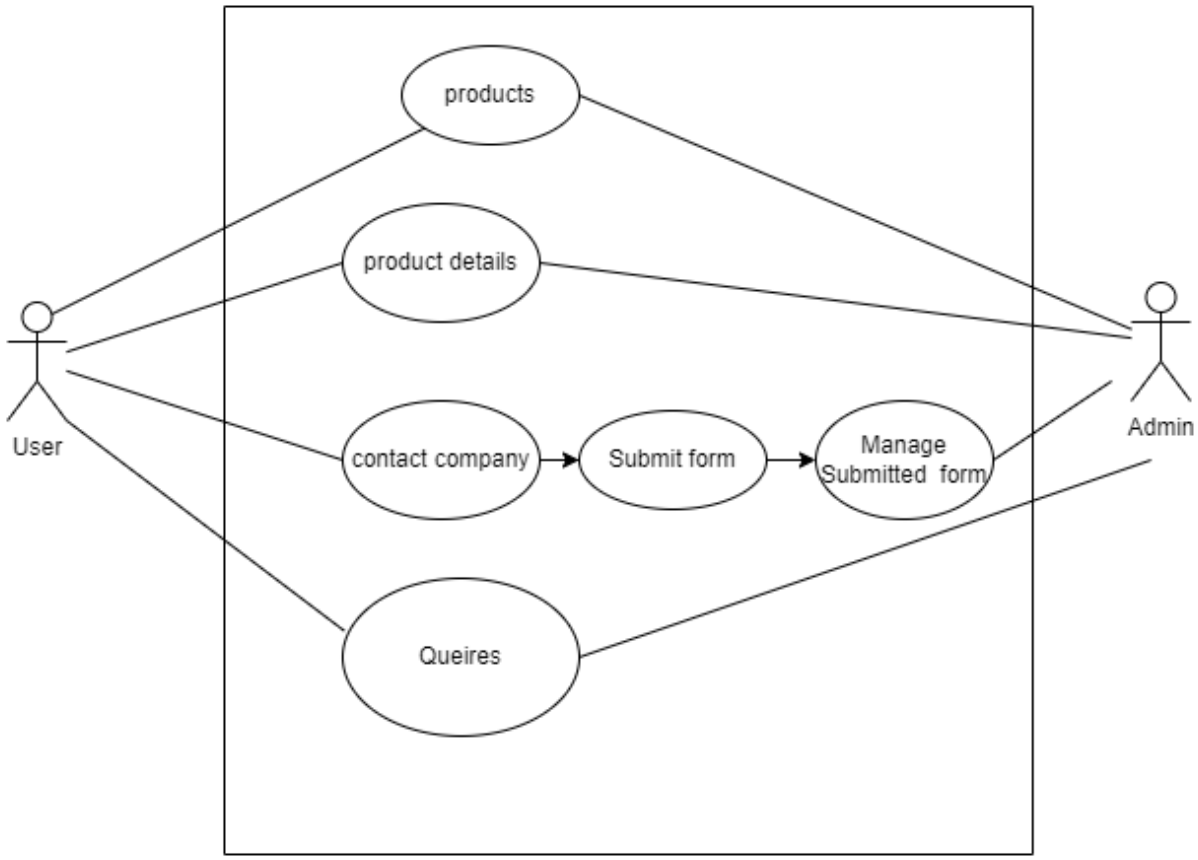

Figure 5.2: Use Case Diagram

Activity Diagram: Another essential diagram in UML for describing the dynamic characteristics of the system is the activity diagram. An activity diagram is essentially a flowchart that illustrates the flow of one action to the next. The action may be thought of as a system operation. The control flow is drawn from one operation to the next. This flow might be sequential, branching, or concurrent.

Activity diagram for User: This diagram illustrates the journey of the users. We have designed the follow activities.

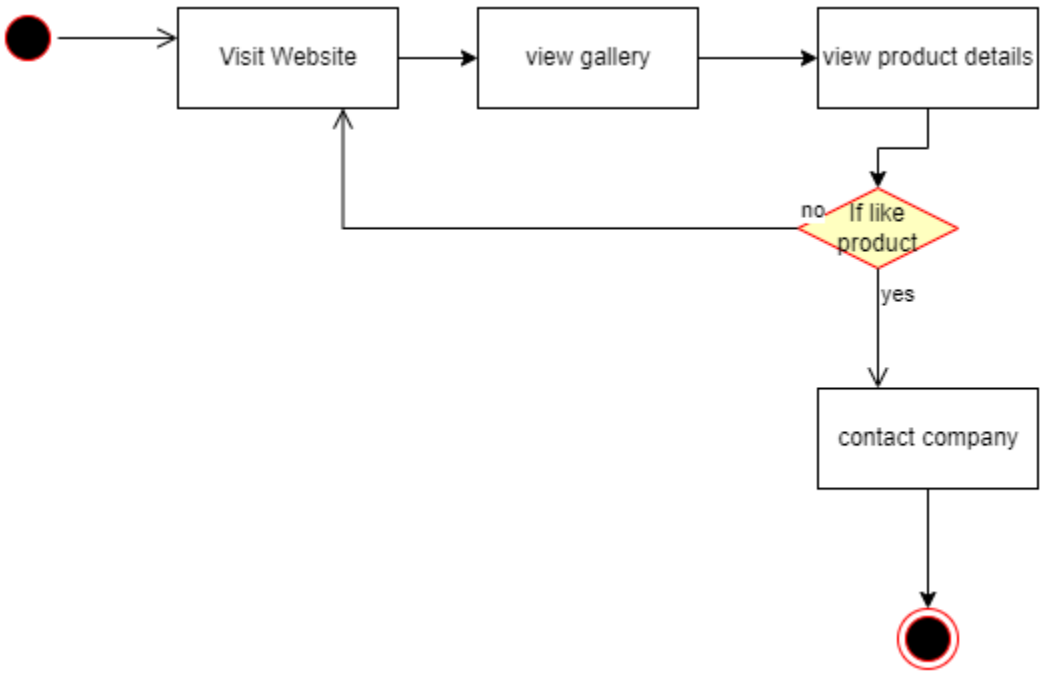

Figure 5.3: Activity Diagram for User

Activity Diagram for Admin: The activity diagram for the admin. This diagram illustrates the journey of the admin where he is in control of the admin panel.

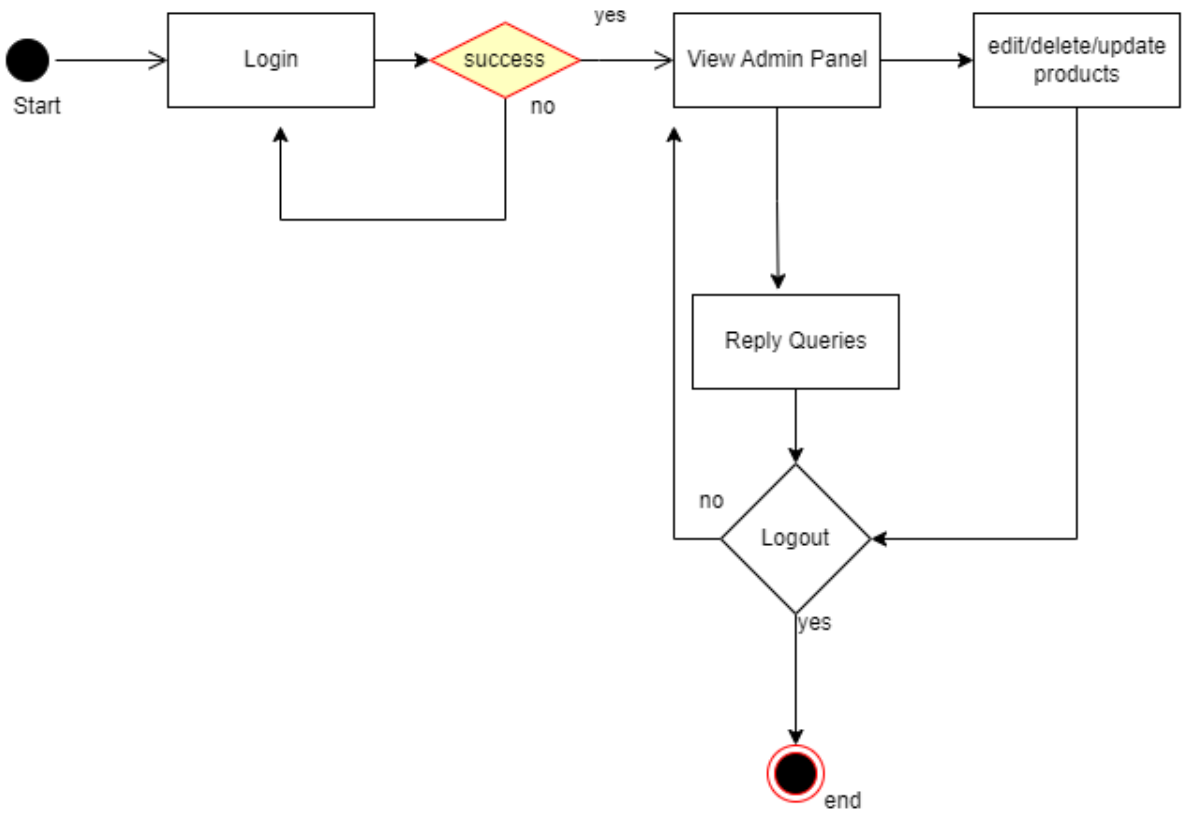

Figure 5.4: Activity Diagram for Admin

5.4.3 Functional and Non-Functional Requirements

Functional Requirements:

Function:	**Finding Desired Property**	
Input:	**Process:**	**Output:**
Select Category, type and Location	Visits the website	Can view all product details
Pre-conditions:	User must have a device with internet connection	
Post-conditions:	User views the desired projects as per choice	

Table 5.2: Functional Requirement for user

Function:	**Contact with the company**	
Input:	**Process:**	**Output:**
Name, number, email, message	Visits Contact Page	Form is submitted
Pre-conditions:	Must provide valid email	
Post-conditions:	Admin answers the Queries accordingly	

Table 5.3: Functional Requirement to Contact

Non-Functional Requirements:

▪Performance:

Performance defines how fast or slow the system will respond. In our project, we gave our focus on the loading time and also handling the traffic of the website at a time. Through following best practices in using good code and content optimization. Also configuring the server so that we can make sure a smooth experience for the visitors ensuring better loading time and traffic handling of the system.

▪Portability and Compatibility:

We made a very user-friendly design for the system and made it responsive for maximum range of devices from mobile to desktop to large tv. Ensuring that the website will be responsive in those resolutions. We also ensured cross-platform compatibility to make sure that the website runs on commonly used browsers and minimum specifications needed to run the system without any issues.

▪Security:

The system is secured at both client end and server end. SSL certification, form validation through CORS – cross origin resource sharing is ensured to protect from unauthorized access and malware attacks. Also, we use some security plugins inside the website to secure it more.

▪Availability Requirements:

It's very important to keep running the system 24/7 for our client. So, we need to ensure and support our system and server running properly without any issues.

▪Maintainability Requirements:

The maintenance of the website has been made very straightforward so that client can easily work and any changes can be easily done through the admin panel with our custom CMS. In case of any issues occurred, it can be easily fixed by updating from our part to resolve the issue.

▪**Usability:**

The whole system is designed in mind of accessing this website and browse through it and find necessary information and straightforward to everything that our client's targeted people need. User interface and user experience design has been done with time so that we can ensure a user-friendly and easy to access design. The admin panel is also designed so the admin can easily maintain the website.

▪**Efficiency:**

The system should be efficient in using the shortest path to complete a task. If there is any duplicate path leading to the same outcome which may result even milliseconds, needs to be eliminated

5.5 Product Features

Product features determine the functioning of the product and how it will benefit its users. Basically, how the client has expected the product to function. Let me demonstrate some characteristics of the website as well as the architecture of it.

5.5.1 Input

In this section I have added screenshots of two scenarios of inputs, one from the regular users (visitor) of the website and another one from specific users (admins).

Our Services

AOP Fabric



Abira International is a reputed AOP fabric supplier in Bangladesh. AOP stands for All Over Print. It is a special kind of printing that is repeated on the whole surface of the fabric. Current fast-growing apparel industry is facing fast fashion youngsters that requires more stylish garment. AOP fabric can meet the requirement. We are best qualify AOP manufacturer in Bangladesh.

READ MORE

Figure 5.5: Types of Products

Knit Fabric

Knit fabric one of the most demanded apparel in the fashion world. Abira International brings you quality satisfaction with our product. Abira International has the largest capacity to produce a variety of knitted fabrics as per buyer demand. Our goal is to meet our customer demand. We are the best quality knit fabric manufacturer in Bangladesh.

READ MORE



Figure 5.6: Types of Products

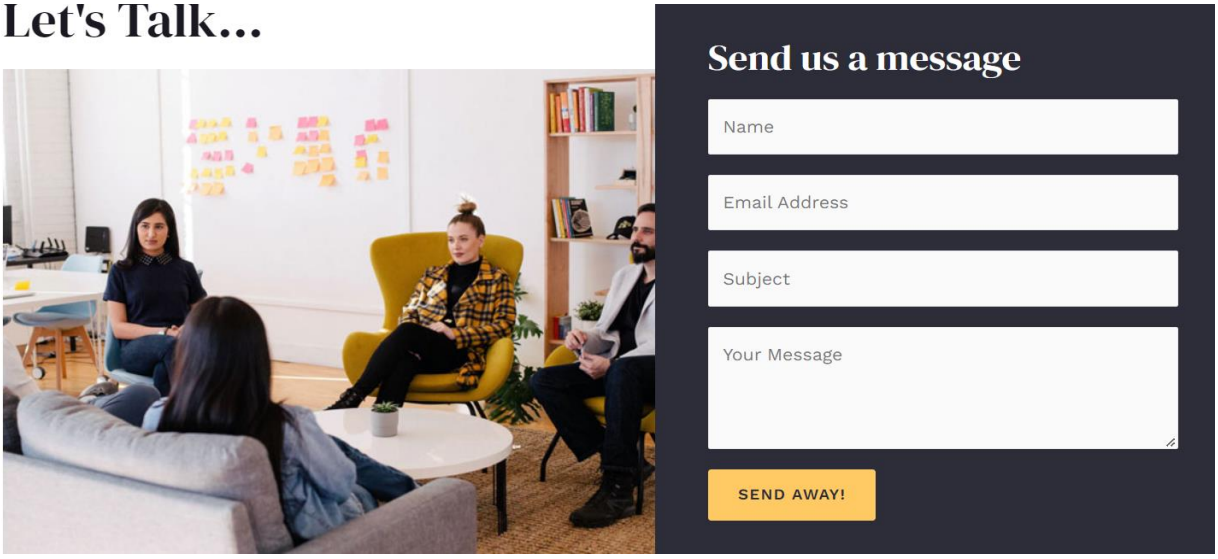

Figure 5.7: Contact Page

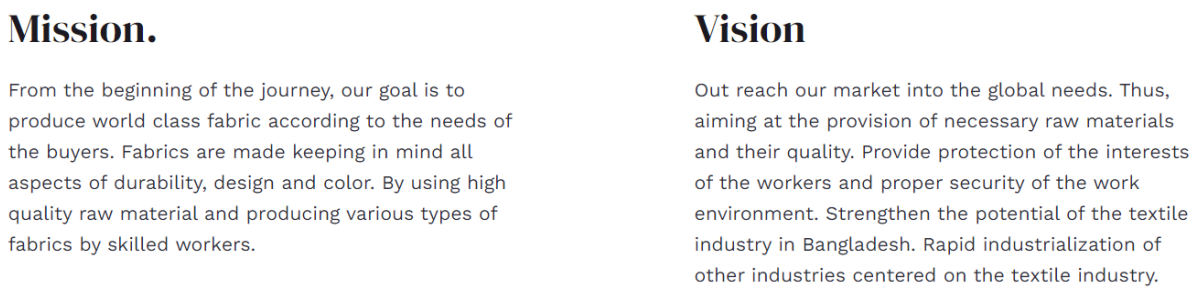

Figure 5.8: Our Vision page

5.5.2 Architecture

Website architecture is the planning and design of the technical, functional and visual components of a website - before it is designed, developed and deployed. It is used by website designers and developers as a means to design and develop a website. A well-thought-out web app architecture can accommodate diverse loads and respond to new service requirements with ease, resulting in a quick user experience. We can understand the architecture of the project from the diagram below that shows how the user will interact with the website and how the website will use those interactions from the user to provide for what the user wants.

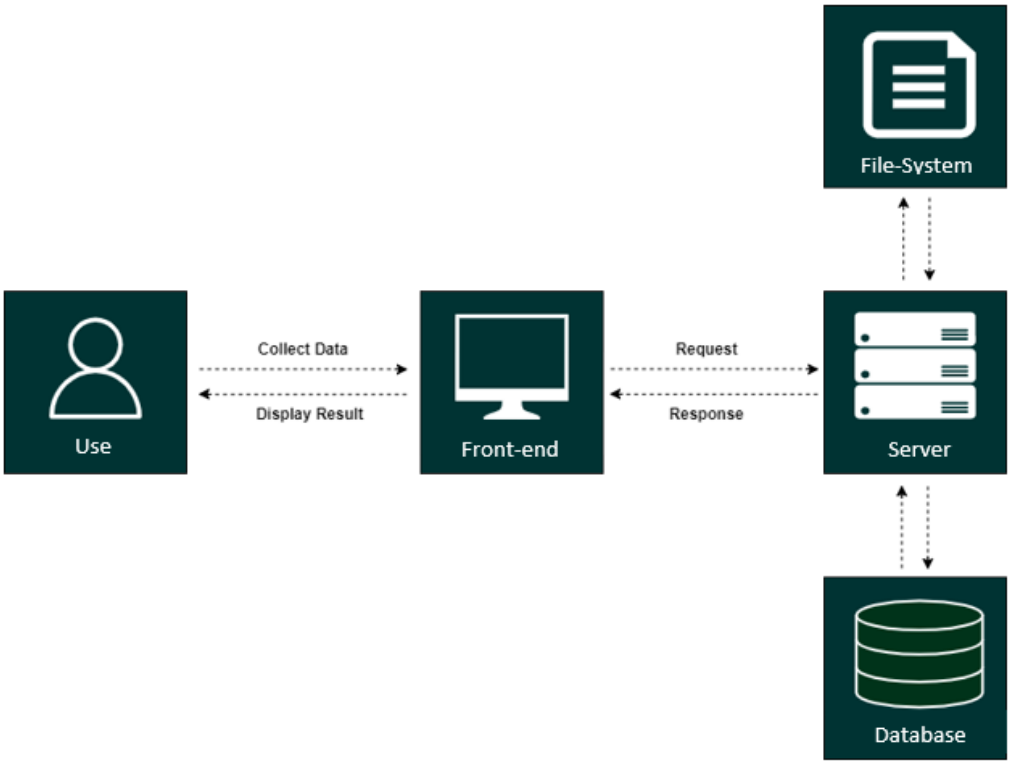

Figure 5.9: Website Architecture

5.6 Implementation

We used few a few language, frameworks and scripts to make the website.

- HTML :- HTML is a hypertext markup language that is specifically used to design the main skeleton of the website.

- CSS :- CSS is the language we use to style an HTML document. CSS describes how HTML elements should be displayed.

- Bootstrap :- Bootstrap is a CSS framework used to develop responsive websites. We used Bootstrap to make the website responsive and mobile friendly. We also used media queries for specific devices to present our website best in all sizes of devices.

- JavaScript :- JavaScript programming interpreter. We used JavaScript in our website along with React.js for the animations, effects and reducing loading time.

- MySQL :- MySQL is a relational database management system. We managed our Database and backend through SQL queries.

5.7 Testing

In our testing we run the website through various process to find out if there is any problem or bugs in the website, and then we try to fix those problems. If the website is not tested then over time, website problems cause users to become dissatisfied, and new visitors can be left with a bad first impression and never return, and hence it gets a bad review from our customers. Testing optimizes your site's performance, security, and stability, and its applications can be improved to ensure the success of your website

Chapter 6

6 Results & Analysis

6.1 Results

Abira International wanted to make a website to showcase their work to the world and for the world to see their products and if they wanted to do business with them then they have can contact through this website. They wanted to boost their company exposure in order to attract foreign clients and I think we managed to make a website according to their desire that made them satisfied with the website.

6.1.1 Nav Bar:

In the Nav Bar there are many options like About Us, Home, Galley etc. The customers can go to different pages by clicking on those options.

Home page:

The home page is the first thing that is loaded when the site is accessed and viewed by any user. Home page gives a summary of the whole website which was designed in such a way.



Figure 6.1: Home page

In the home page there is also regions where you can see the reviews of the customers with whom they have worked before.



Figure 6.2: Testimonials

There is also a section where any user can see the companies that they have worked with before.



Figure 6.3: Trusted By

Footer:

A global footer is also used. It is accessible from all pages with contact details and social media links

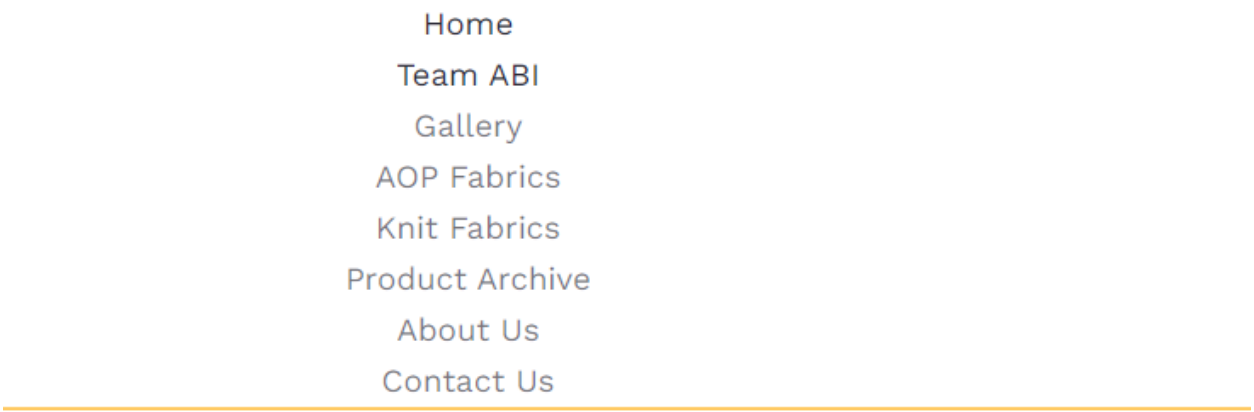

Figure 6.4: Footer

Types of fabrics:

In the nav Bar there is option to select for different types of fabrics. A user can click a Specific type of fabrics and see the designs available for that type of fabrics. You can also see the fabrics details on that page.



Figure 6.5: Knit Fabric

AOP Fabric

We are the best AOP fabric supplier. Abira International ensures the best quality AOP fabric.

Our Services

- Pigment Print.
- Reactive Print.
- Discharge Print.
- Raised Print.
- Glitter Print.
- Burn Out Print.

The popularity of AOP fabric is skyrocketing at the present time. The variety and usefulness of AOP fabrics have made them acceptable to young and old. AOP fabric is also very popular with them because it can be read with a lot of joy and comfort. An attractive design makes the fabric more vibrant. And we work towards that goal. We make a wide variety of knit fabrics by identifying the right raw materials and maintaining quality. The lion's share of our income also comes from this AOP fabric and it is increasing significantly. So we are committed to reaching specific goals & further quality development.

Figure 6.6: AOP fabric

About Us:

The about us page can be accessed upon selection about us button from Home page about section or the footer.

We are Knit Fabric Supplier



We are Knit Fabric supplier as we as AOP fabric supplier.

Figure 6.7: About Us

6.1.2 Test Case:

A test case is a statement that includes a set of test data, preconditions, likely consequences, and post-conditions for a specific test scenario to ensure compliance with a specified requirement. Following the application of a set of input values, the program comes to a conclusion and quits the system at some point, also known as the execution post-condition. We executed a test case to check the quality and operation of the website.

6.1.3 Issue Tracking and Report System:

The complete version of the website will be uploaded to Pridesys's test server and the URL will be shared with the development team and a quality assurance tester. During the development phase, the QA tester will begin testing alongside the members of the development team. All modules and capabilities will be tested thoroughly. When a problem is detected, it will be documented on a shared Google sheet with a thorough explanation of the issue. The developer will resolve the issues and mark them in the spreadsheet as resolved. Issues are noticed and resolved once again before sharing the project's test server URL with the customer for testing. Client feedback will be gathered, and any issues that arise will be addressed before the project's final release.

The following functionalities has been tested for this particular website:

- Update product
- Delete product
- Mobile responsive
- Contact forms

Chapter 7

7 Project as Engineering Problem Analysis

7.1 Sustainability of the Project

Every project that is made must be sustainable for a certain amount of time that is required by the company, and for that reason every project must undergo upgrades or modernization to keep up with the technology of that time. Modernization is a difficult process in general, but it is important to make it as much easy as possible so that it is more sustainable in the long run. In the case of software and web development, systems are built to be sustainable so that they may be used continuously without causing difficulties for both the owners and the users. To ensure the long-term viability of our project, the website is built to be accessible independent of the user's machine's environment. The website we made is such that it is mostly independent of the operating system, user's hardware capabilities etc and hence useable from mostly any device that has access to the internet.

To ensure the sustainability of the website we have to do some maintenance of the website from time to time. The codes of the system are well structured so that the maintenance is hassle free. In terms of style and layout, the website is meant to be user-friendly, with a focus on the User Experience. The website is made in such a way that is easy to access the website even by people who are not very fluent on navigating the internet.

7.2 Social and Environmental Analysis

The website that we made for Abira international displays all the different types of product that their company produce and the users visiting the website will have a solid understanding about the product and how they are made. As the website is user friendly, so it will save a lot of time of the user to know details about the product and ask questions if they have. And any user can do all of this from anywhere around the world just with a few taps of their fingers, which ultimately saves lot of energy. People don't have to use transport too go to the library, shop or the factory to know this information; hence it saves energy and is good for the environment.

At Pridesys IT we always try to design and develop websites to maximize efficiency while using the least amount of resources. We attempted to optimize our code and media material to the

greatest extent feasible. The website is ad-free, there are fewer redirections, and only basic plugins are utilized, all of which contribute to overall optimization, resulting in less power consumption and energy savings. Along with saving energy in the website, we also try to save energy at the office by using energy saving equipment.

7.3 Addressing Ethics and Ethical Issues

Ethics are very important issues while working with online software developments. It is important to be ethical when collecting user's information and more important in using that information. Sensitive data is constantly shared on the internet via numerous systems; thus, it must be assured that the data is not compromised in any manner. Nowadays many companies collect user data and sell it unethically to other companies which we strictly prohibit in our company. Some ethics that we follow in our company are:

- The website only collects necessary user information, such as a user's name, email address and phone number.
- On the website, there is not any kid of discrimination or preference based on race, sexuality, gender, religious beliefs, color, language, political or other perspectives, national or social origin, property, birth, or any other status.
- Background data is only accessible by the leading developer.
- To preserve the company's and our clients' privacy, Pridesys maintains all project related documentation, transactions and agreements, and coding confidentiality.

Chapter 8

8 Lesson Learned

8.1 Problems faced during this Period

The corporate life is very different from that which I learned at university life. Working on real life project is far more different and intense compared to what we did in the courses at my university. Working as an intern in Pridesys was a privilege for me as I have learned, in terms of coding and lifestyle, while working in real life project there. Despite the amazing experience, there were certain constraints throughout my internship term. My mother became very ill due to kidney disease and so I had to work from some time and I am very grateful to all the members at Pridesys for being very understanding and cooperative with me during that time.

As I was new to the corporate life so it was hard for me to adapt to the new technologies in such a short time. I didn't want to disturb my senior's work flow to ask about everything, but they were very helpful and encouraged me to ask anything if I have any problems. The pressure was even more when my mother became sick with kidney disease. I had to balance my time for learning and working and taking care of my mom.

8.2 Solution of those problems

When I had to learn a lot in a short time in the beginning of the internship I had to work late at night, watching youtube videos and learning from google to understand the new technologies that was used.

When my mom was sick, I couldn't go to the office so I had to work at my home and contact my seniors if I had any problem understanding using skype or meet.

Chapter 9

9 Future Work and conclusion

9.1 Future Works

Pridesys IT always hopes and tries to ensure strong relationship between us and our customers. We always believe that if we can keep our customers happy then it will positively ensure that we can do more work with them in the future. To make our customers happy we often make many changes according to the customers desire even though it sometimes makes it a hassle for our developers. For this website, I thing in the future they might want to enlarge and make some addition capabilities when their company starts growing more.

9.2 Conclusion

Working with Pridesys for this project has been an incredible experience for me. Working with this project I learned a lot of things from my colleagues which evolved my knowledge and understanding about making a website. I've also learned how to work within tight deadlines and under pressure. This internship has given me the opportunity to learn more about the development environment and market.

Thanks to Pridesys and all of my colleagues and seniors for proving me such a wonderful environment for learning and evolving myself.

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An Undergraduate Internship on Abira International

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Autumn, 2022

Consent from Supervisor

The student modified the internship final report as per the recommendations made by his academic supervisor and/or panel members during and/or before final viva, and the department can use this version for archiving as well as the OBE course material for CSE499.



(Signature of the Supervisor)

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