



An Undergraduate Internship/Project on “Website for AWR Real Estate Limited”

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Spring, 2022

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

Department of Computer Science & Engineering

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Attestation

This is to attest that the report titled “AWR Real Estate Ltd ” was completed by me, MD Zahidul Islam (ID - 1721883) submitted in partial fulfillment of the requirements for a Bachelor’s Degree in Computer Science and Engineering from Independent University, Bangladesh (IUB). It has been completed under the guidance of Bijoy Rahman Arif (Internal Supervisor) and Saif Islam (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 have been duly acknowledged in it.

Signature Date

Md Zahidul Islam

Name

Acknowledgment

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 Bijoy Rahman Arif, Lecturer, Department of Computer Science Engineering, Independent University of Bangladesh, for his 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 the necessary information and skills during my Bachelor's degree in CSE. My heartfelt gratitude goes to Mr. Khairul Hasan, CEO of Dcastalia, for providing me with the chance to serve as an intern with Dcastalia Ltd. My time in Dcastalia was nothing short of fantastic, and I greatly liked working and studying here. I'd also want to thank Mr. Saif Islam, Full Stack Developer, for his excellent advice and supervision throughout the internship. Last but not least, I would want to thank all of my colleagues in Dcastalia 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 like 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

April 2022

Bijoy Rahman Arif

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

Subject: Submission of Internship Report.

Dear Sir, With great respect and dignity, I would like to submit my Internship report in order to complete my Bachelor of Computer Science and Engineering degree. This report is based on my internship experience at Dcastalia Ltd, which began on January 17, 2022, and continues to this day. As a Frontend Developer intern, I was assigned to the development team. I completed my internship at Dcastalia Ltd. effectively.

I worked in Dcastalia under the direction of Mr. Saif Islam, Full Stack Developer. This report is based on my Dcastalia project. I was assigned to the project AWR Real Estate Ltd, where I worked as the team's front-end developer. My time in Dcastalia was terrific. 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, which I feel I have accomplished by working here.

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 an excellent standard. I would also want to thank you for providing me with the chance to submit my report.

Sincerely,

Md Zahidul Islam

ID 1721883

Evaluation Committee

Signature

Name

Supervisor

Signature

Name

Internal Examiner

Signature

Name

External Examiner

Signature

Name

Convener

Abstract

This report is based on my three-month work experience with Dcastalia Ltd. I worked as an intern as a web developer in the company's current client project. The project that I had to work under was Web site for AWR Real Estate Ltd. Bangladesh has been emerging as a digital nation, with a large number of people utilizing the internet and the number continues to grow. This creates a big potential for businesses to market themselves online. Dcastalia Ltd 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 website's goal is to provide essential information to customers and potential consumers, showcase projects, as well as an easy way to contact or organize a meeting, and to promote the brand to the local community.

This report is divided into 9 chapters, and each chapter is divided into few smaller sections. At the very beginning of the report I had to write about the Introduction of the project, the overview, objectives and scopes of my project. In the second chapter I had to write about how my Internship is related with my Undergrad studies and also if there any similar system out in the market which I am working on. In the third chapter I had written about how I am going to breakdown the works into smaller chunks, I have written about the time distribution given for each tasks, a Gantt chart where we can in which week what task is being done. In chapter 4, I have written about the methodology that will be used in the Project. The most Important chapter of the Report is Chapter 5. In this chapter I have written about the description of the work. System analysis was also done in this Chapter. The sections included in System analysis were Six Element Analysis, Feasibility Analysis and Problem Solution Analysis. I have also drawn Rich Picture of the System, UML diagrams and the Functional and Non-Functional requirements. I also wrote about what are the Inputs system will take and the expected output. In chapter 6, I have attached UI and also have given a test table. Chapter 7 was about the sustainability of the Project, the social and environmental effects and the ethics. In chapter 8 I have written about what I have learnt throughout the Internship. And finally in the last chapter, I have mentioned the future works for the project and then have given a conclusion of my report.

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Chapter 1

Introduction

1.1 Overview/Background of the Work:

The company under which I am doing my internship is Dcastalia Limited. it's a software development company in Bangladesh that started its journey back in 2009, with the aim to deliver personal, passionate, and tailored services. Over a decade's operation, they have marked a place of reliability and trustworthiness both nationally and internationally among their clients of different industries. they have been helping organizations with complete technological solutions consisting of services like software development, web design and development, digital marketing, technical support, graphic design, and many others. website is becoming more and more necessary for any kind of company in this era of digitalization and automation. it is highly unlikely that the Real estate company can ever grow into a BRAND from that. It has to have a showcasing website and a really good-looking one. The project I am assigned to by my supervisor Mr. Saiful Islam at Dcastalia is a web-based project for AWR Real Estate. I will work along with a team of the finest web developers to help build this project.

1.2 Objectives:

The aim of this project was to develop a real estate listing service is to manage all the information about the property, property type, property details, Facility, Location, etc. There are some important issues in developing the real estate website. First, the search time should be kept to a minimum. This depends on selecting the appropriate development environment and using good development techniques. Second, the website should provide the services that both buyer and seller want. Third, the website should have a friendly user interface. This project is developed based on the HTML, CSS, JavaScript, Jquery, PHP, and MYSQL servers.

the salient features of my project are

1. Property list and Description with Images
2. Searchable listings.
3. Type that's accurate and easy to read.
4. Customer-centric content.

5. Information prospects can use.
6. Career form, news, and events
7. Google Maps

I want to show a live build, error-free website. that satisfies the user's requirement and be easy to understand by the user and operator. also, I want the operator can editing, adding, and updating of records to improve the website.

1.3 Scopes:

- 1. Home Page- Users can find the Property list and Description with Images and search by Property name and their location
- 2. About Us Page- Users can find an Overview of AWR Real Estate and their story, a section of Chairman speech, CEO's Speech, MD's Speech, Corporate Social Responsibility Section, Concern Section, and their management team section, etc.
- 3. Projects Page- Users can find projects categories with specifications and features, Interior and exterior sections, and Ongoing, Completed, and upcoming sections.
- 4. News and events Page- Users can find any upcoming news and events section
- 5. Career Page- The user can find a Career form and the user will be able to submit it from this page
- 6. Contact Page- Users can find landowners, buyers, and customers overview section and contact section.

Chapter 2

Literature Review

2.1 Relationship with undergraduate Studies:

CSE 203, Data structure:

This is the most fundamental course that helped us a systematic way to organize data in order to use it efficiently and the ideas of several data structures and their applications such as Stack, Queue, Linked List, Array, and so on.

CSE 303, Database Management:

This was a core subject that taught us how to plan and design a project. This course gave me the fundamentals of a database and how it works, such as Rich Picture, six-element analysis, business process model diagram, Entity Relationship Diagram, Converting ERD-Relations, Normalization, and Structured Query Language. All of these skills came in handy as I developed and planned the project. Knowledge of MySQL, PHP, and the use of a local server was also important in making my project dynamic.

CSE 307, System Analysis and Design:

This course provided a basic overview of the Software Development Life Cycle and gives an overview of the Used Case Diagram, Class Diagram, Activity Diagram, Sequence Diagram, Business Requirement Document (BRD), Software Requirement Specification (SRS), System Design Documents (SDD) and many more.

CSE 309, Web Application and Internet:

This is the course where the development of web applications was taught. It covered very important technologies that are highly in demand in the industry, such as HTML, CSS, Bootstrap, JavaScript, JQuery, PHP, and MySQL.

2.2 Related Works:

Concord Real Estate: Concord Real Estate is one of Bangladesh's leading real estate and construction conglomerates. Concord constructed over 1,200 projects and handed over more than 10,000 residential and commercial units to their customers. Concord constructed the National Martyr's Monument in Savar in only 89 days. [\[https://concordrealestatebd.com/\]](https://concordrealestatebd.com/)

Edison Real Estate: Edison Real Estate is a Bangladesh real estate developer company, a concern of Edison Group (Symphony Mobile) founded in 2009. Edison Real Estate Ltd started its journey in the real estate sector of Bangladesh from 2015, and now it is one of the best real estate companies in Bangladesh. [\[https://edisonrealestatebd.com/\]](https://edisonrealestatebd.com/)

Mir Real Estate: Mir is the name of hope and inspiration in the real estate sector. Since the start of the company in 2006, Mir real estate has guaranteed the satisfaction of its clients. The specialty of Mir real estate is producing powerful construction by utilizing high-quality materials from its own concerns. [\[https://www.mirrealestate.com/\]](https://www.mirrealestate.com/)

Chapter 3

Project Management & Financing

3.1 Work Breakdown Structure

A work breakdown structure (WBS) is a tool that can be used for projects, programs, and even initiatives to understand the work that has to be done to successfully produce a deliverable. WBS is a hierarchical structure that demonstrates the breakdown of a project into smaller segments. For our projects, we produce a WBS so that our work is coordinated. WBS covers a visual of all the scopes, risks, points of communication, responsibilities costs, and guarantees, that do not skip essential deliverables. For brainstorming and collaboration, it is the ideal tool for the team. In our WBS, we have used the top-down approach.

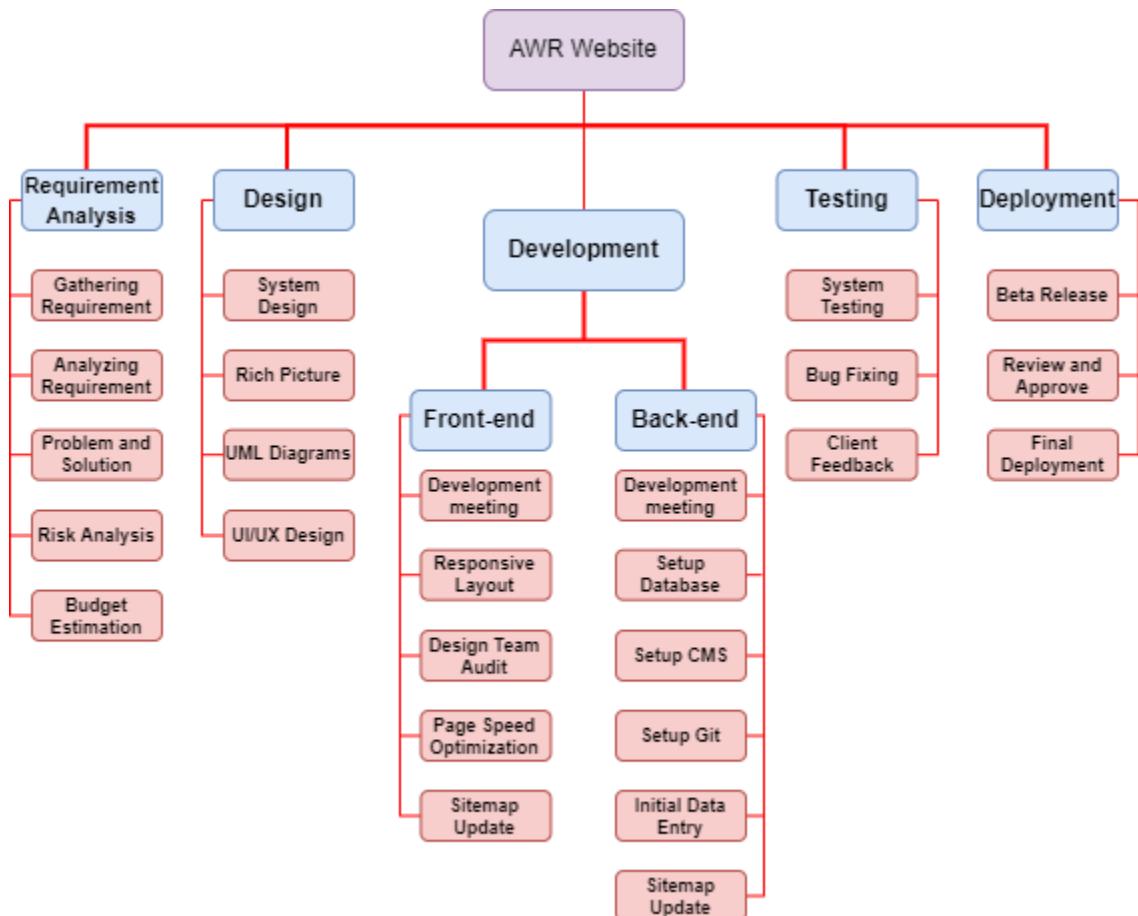


Figure 3.1: WBS of AWR Website

3.2 Process-wise Time Distribution

Typically, the project is expected to take 60 working days to complete. The entire task is separated into five core functions, all of which account for 100 percent of the overall effort. Some of which are critical and some are noncritical.

Activity	Days
Requirement Analysis	10
Design	10
Development	25
Testing	10
Deployment	5
Total	60

Figure 3.2: Process/Activity wise time distribution

In this table, we can see that Requirement Analysis will take about 10 working days to finish, it will take 10 working days to finish the design of the project, for the core part of the project, which is deployment, it will take around 25 working days to complete. For the testing and bug fixing of the project, it might take around 10 working days. And for the deployment, we kept 5 days in hand.

In total, we can see that we have 60 working days to complete the project. It will take approximately 3 months to complete the project.

3.3 Gantt Chart

A Gantt chart is a chart that shows all of the different sub-tasks of a project and how they relate to each other over time. A Gantt chart shows all of the tasks that need to be done, the amount of time each task is expected to take, the time frames in which individual tasks are to be completed, and the relationship between various tasks. This way, everything gets done on schedule, and you never waste time waiting for a task to be completed that should have been done already. For these projects, a Gantt chart was used in the planning phase of the application. Gantt charts are commonly used for tracking project schedules, and they're especially useful in project management.

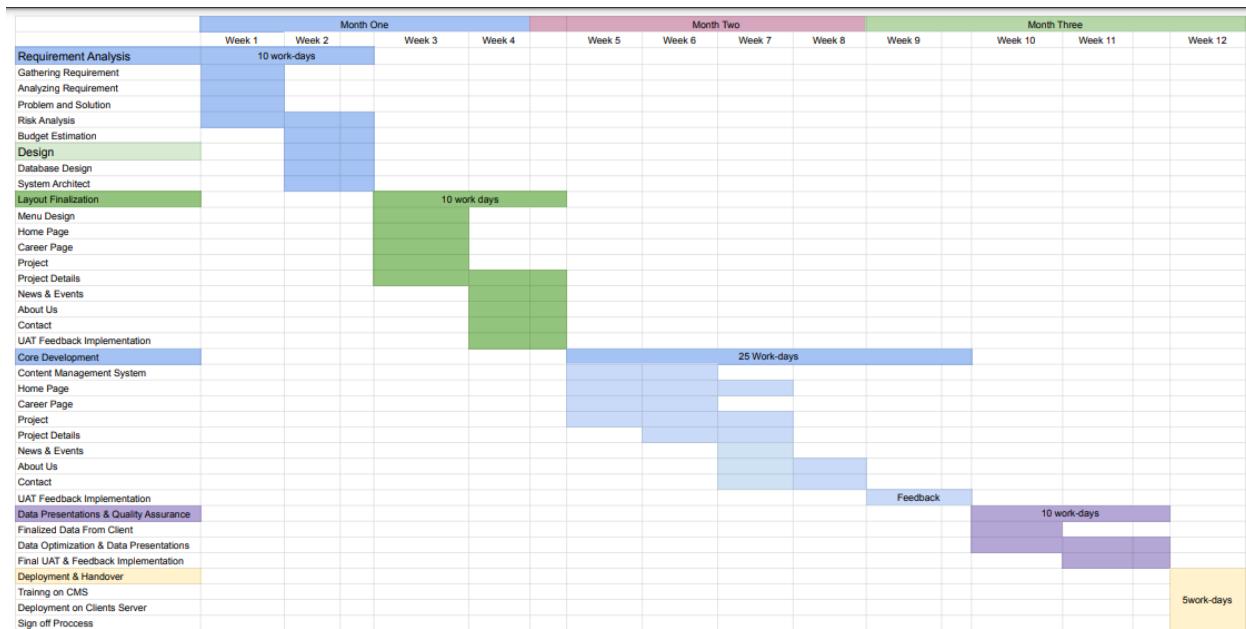


Figure 3.3: Gantt Chart

3.4 Process/Activity wise Resource Allocation

As I stated before, the entire task is separated into five basic functions, each of which accounts for 100 percent of the overall effort from the designer, developer, and other stakeholders. 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 eight people.

1. Project Management: 1 Project Manager
2. UX and UI Design: 2 Designers
3. Frontend and Backend Development: 3 Developers
4. Quality Assurance: 1 QA Engineer
5. Data Presentation: 1 Person

We have a table to demonstrate how much work should be done or expected from the team in a particular amount of time.

Task	Days	Work Percentage
Requirement Analysis	10	10%
Design	10	25%
Development	25	50%
Testing	10	10%
Deployment	5	5%
Total	60	100%

Figure 3.4: Activity wise work percentage allocation

3.5 Estimated Costing

Just like any other development-based application 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 2,75,000 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)
UI/UX Development	45,000/-
Web Modules & Functionality Development	150,000/-
Web Hosting Maintenance Service	80,000/-
Total	275,000/-
Optional: Dedicated Mobile Version	50,000/-
Additional: Theme Plugin Customization	6,000/-

Figure 3.5: Estimated Costing

Chapter 4

Methodology

The software development process is a method of breaking down software development work into phases to improve the design of the system, improve the project management. This is also known as Software Development Life Cycle (SDLC). The 7 phases of SDLC are Planning, Analysis, Design, Development, Testing, Implementation, and Maintenance.

There are many SDLC methodologies, they are:

- Waterfall
- Lean
- Agile
- Iterative
- DevOps
- Spiral
- Prototyping

The SDLC methodology that we will be using in our Project is Agile. The Agile methodology is a method of project management that divides a project into numerous phases. As the project is broken down into smaller phases, the work can be done faster and more efficiently. All the features are not needed to be done at once; we can do them part by part. When we complete a task, we can get feedback almost daily and quickly act on that feedback immediately. We can have better control of the project in Agile.

Chapter 5

Body of the Project

5.1 Work Description

AWR Real Estate Limited inaugurated its journey by holding the hand of AWR Developments (BD) Ltd, the leading and prominent name in the construction engineering industry. In 2007, AWR Developments Limited announced its genesis in the Real Estate sector within two years of its own establishment which ultimately gave birth to AWR Real Estate Limited. Alongside, AWR Real Estate is one of the fastest-growing arms of IPE Group which is located in central London with multinational operations. I had the privilege to be a part of this world-class website development team. The core functionality of the website was to showcase the numerous projects. These project brochures can also be downloaded from the website which can be uploaded from the CMS as most of the section of the website is made dynamic and can easily be created, updated, or deleted. Anyone visiting the website can contact the company through the contact form for any customer services.

My role in this project was primarily in the front-end section. This may sound less but the first few weeks passed for me to align my code structure with the developers as they followed an industry-standard design. And after some time of doing mock-ups of previous project pages, I started contributing to the main project. The front end is built with HTML, SASS, customized jQuery functions, plugins, and JavaScript for animations. We used PHP for the back-end CMS using Yii 2.0 framework and MySQL for the database.

5.2 System Analysis

Systems analysis is the process by which a person (s) examines a system in order to assess, model, and choose a logical alternative for an information system.

5.2.1 Six Element Analysis

The six-element analysis is a method where we can know about the stakeholders, non-computing hardware used, computing hardware used, the software used, the database, and the network needed for a particular process in the system.

Process	Human	Non-Computing Hardware	Computing Hardware	Software	Database	Network and Communication
Manage Forms	Admin	N/A	Computer	Web Browser	MySQL	WAN/LAN
Submit Forms	User	N/A	Computer/Mobile	Web Browser	MySQL	WAN/LAN
Update/Delete Item	Admin	N/A	Computer	Web Browser	MySQL	WAN/LAN
View Item	User	N/A	Computer/Mobile	Web Browser	MySQL	WAN/LAN
Update News & Events	Admin	N/A	Computer	Web Browser	MySQL	WAN/LAN
View News & Events	User	N/A	Computer/Mobile	Web Browser	MySQL	WAN/LAN
Update Brochure	Admin	N/A	Computer	Web Browser	MySQL	WAN/LAN
View / Download brochure	User	N/A	Computer/Mobile	Web Browse	MySQL	WAN/LAN

Figure 5.1: Six Element

5.2.2 Feasibility Analysis

A feasibility analysis is a process of assessing and analyzing a project or system that has been suggested. The goal of the study is to see if the idea is technically and financially feasible. A feasibility study also analyzes whether or not a project is financially viable. The basic purpose of a feasibility study is to achieve the scope, not to solve the problem. Feasibility Analysis is categorized as Technical Feasibility, Operational Feasibility, Economic Feasibility, and Schedule Feasibility.

1. Technical Feasibility: Dcastalia 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: This analysis is carried out to determine the cost and benefit of the project. A detailed cost proposal for website development was generated, including all cost breakdowns. This expense is then weighed against whether the website would be financially beneficial to the company. More digital presence means more revenue.

3. Operational Feasibility: Because of last year's pandemic and the current economic situation, the website is very plausible, as more and more users are getting digitally active. Because of this website, visitors and overseas clients may now quickly and easily find all of the information they need as this is a multinational company. Also, the project plan satisfies all of the project completion standards.

4. Schedule Feasibility: This is the most critical assessment for project success. We predict the length of time it will take to finish a project in scheduling feasibility which in this case is 60 working days and some room for flexibility. The project will complete on time as the given milestones are being accomplished on schedule.

5.2.3 Problem Solution Analysis

Throughout the development phase, I have faced a few problems. When I started my internship the project was in the requirement analysis phase. The development was yet to start almost a month after. This project being my first real client-based project I was overwhelmed with the accountability and deadline pressure. I had basic knowledge about website development from both self-taught and university courses but as I have mentioned before I did not have the industry standards for the code structure. So, I had to relearn my way to code HTML, CSS, and Bootstrap alongside learning JS and

jQuery. I had very little experience on jQuery and JavaScript. And now awards every website is made to be mobile responsive which was another challenge. It took me some time to get with the flow but I eventually contributed to sections that were mobile responsive as well as optimized for less server request initially and increasing while the user loads the page. This was not easy because even after getting help from seniors they could not spend hours teaching me new methods. So, to keep afloat and aligned with the team I had to do extensive research with the help of the vast online resources.

5.3 System Design

5.3.1 Rich Picture

Rich pictures are graphical depictions of a system. They can assist in the organization of complicated situations and the identification of underlying issues by including all necessary system parts and stakeholders. Any approach may be used to build a rich image, and it can be applied in any scenario, regardless of its complexity. The following figure shows the rich picture of the project.

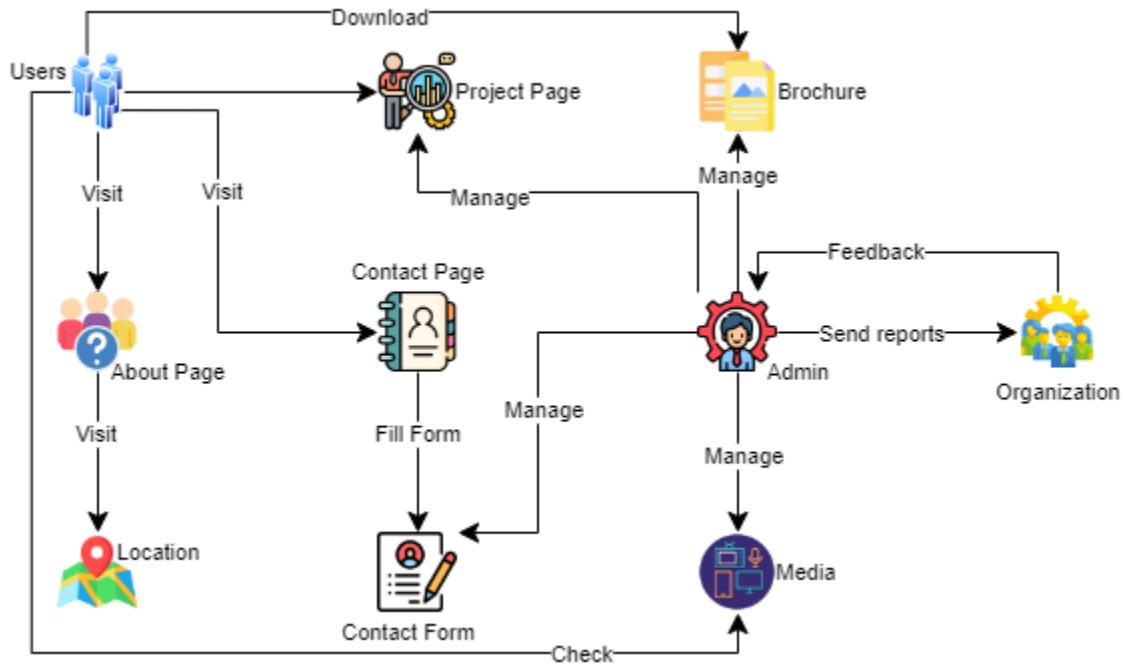


Figure 5.2: Rich Picture

5.3.2 UML Diagrams

A UML diagram is a diagram based on the UML (Unified Modeling Language) that is used to visually represent a system, as well as its primary players, roles, actions, objects, or classes, in order to better understand, edit, maintain, or document system information. For this project I will draw 3 UML diagrams, they are Use Case Diagram, Activity Diagram and Entity Relationship Diagram.

1. Use Case Diagram: Use-case diagrams are a type of UML diagram that helps to represent a system's behavior and capture its needs. The high-level functions and scope of a system are described using use-case diagrams. The interactions between the system and its actors are also depicted on these diagrams. Use-case diagrams show what the system performs and how the actors interact with it. A Use-case diagram is the starting point for UML modeling. The figure below shows the use case of a user and an admin.

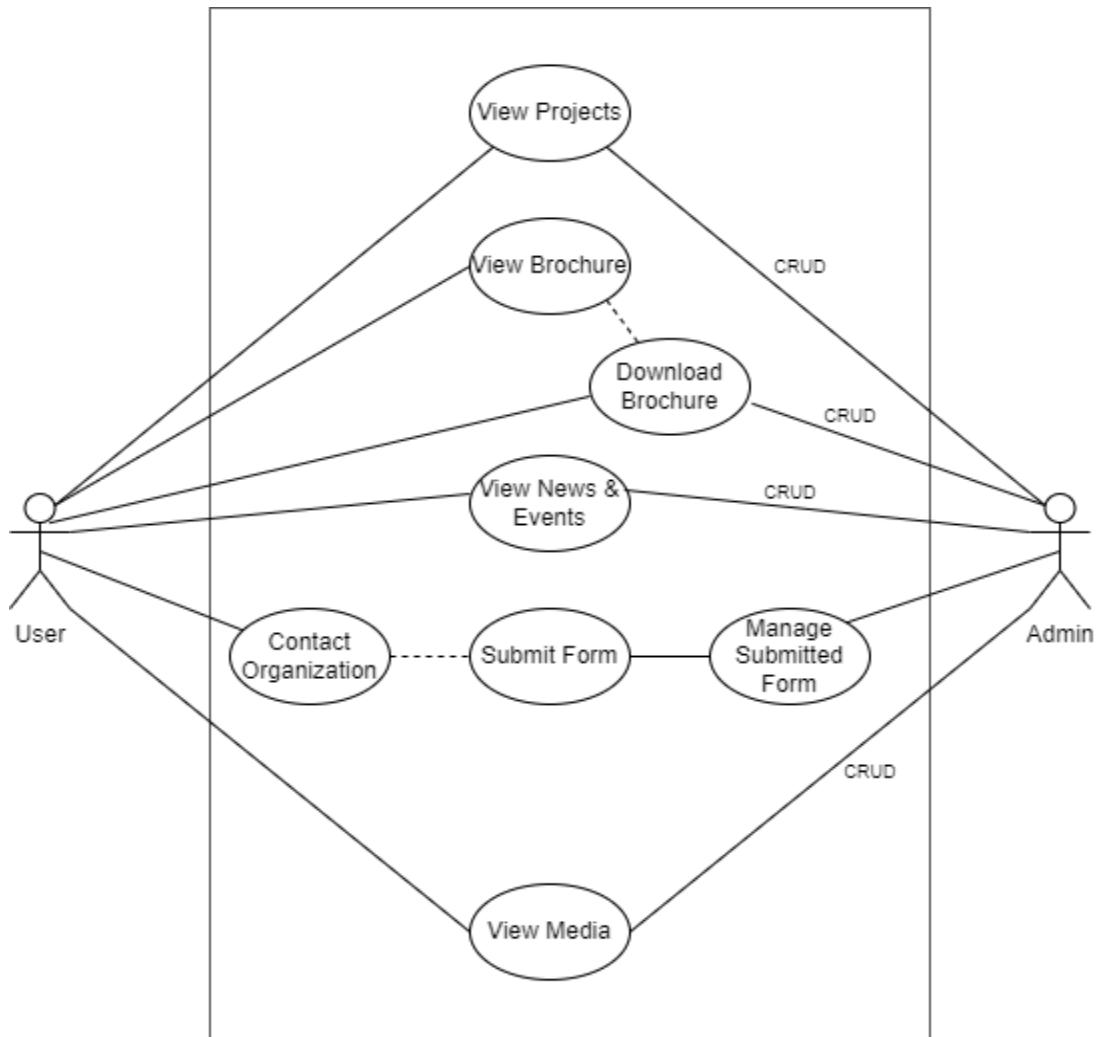


Figure 5.3: Use Case Diagram

2. 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 diagrams deal with all types of flow control by embedding various parts such as fork, join, and so on. I will be demonstrating 3 activity diagrams.

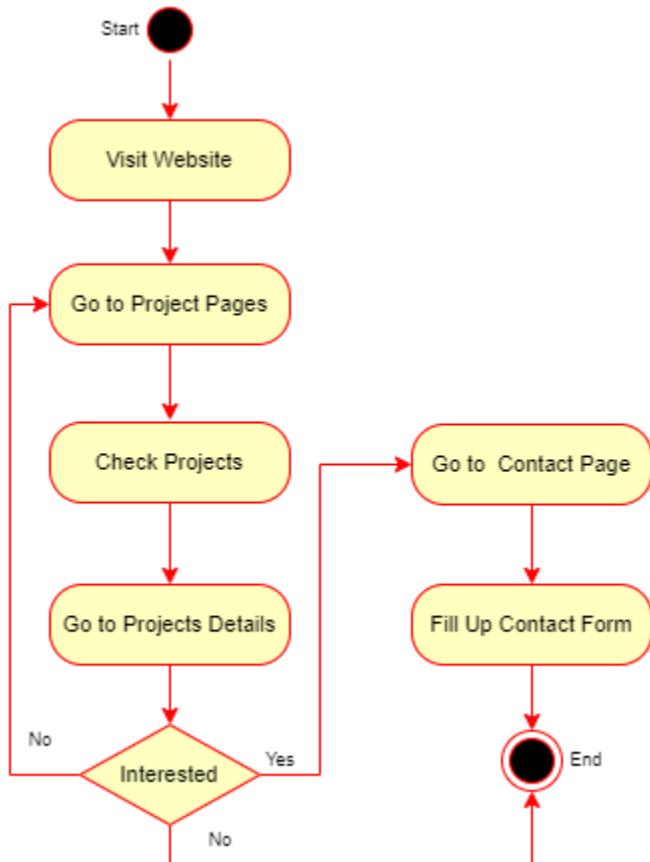


Figure 5.4: Activity Diagram for Contact Form

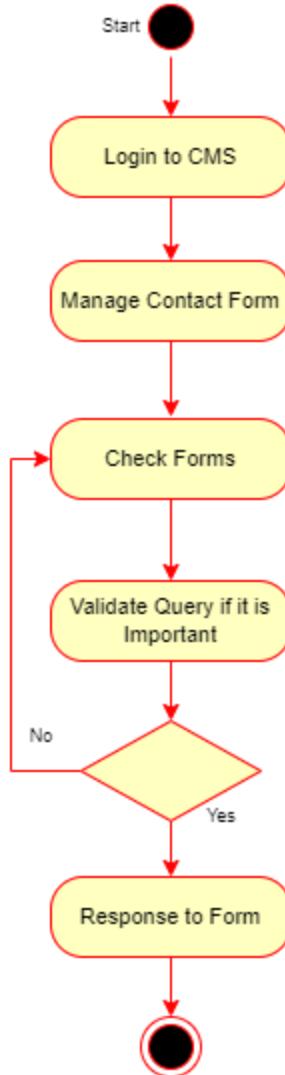


Figure 5.5: Activity Diagram for Response Form

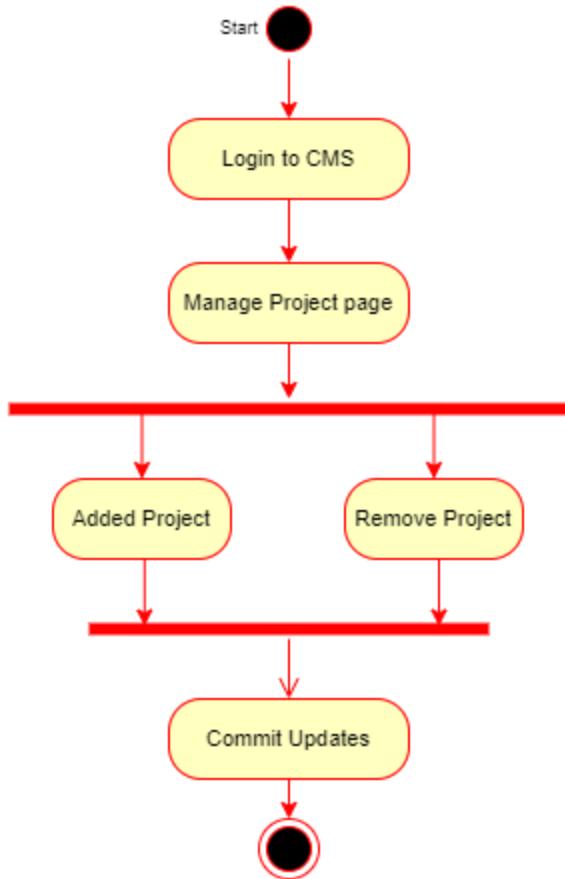


Figure 5.6: Activity Diagram for Managing Projects

3. Entity Relationship Diagram: An ER diagram depicts the connection between entity sets. An entity set is a collection of comparable entities, each of which can have characteristics. In terms of DBMS, an entity is a field or an attribute of a field in a database, hence an ER diagram depicts the whole logical structure of a database by displaying the link between tables and their attributes. Let us look at the project's simple ERD.

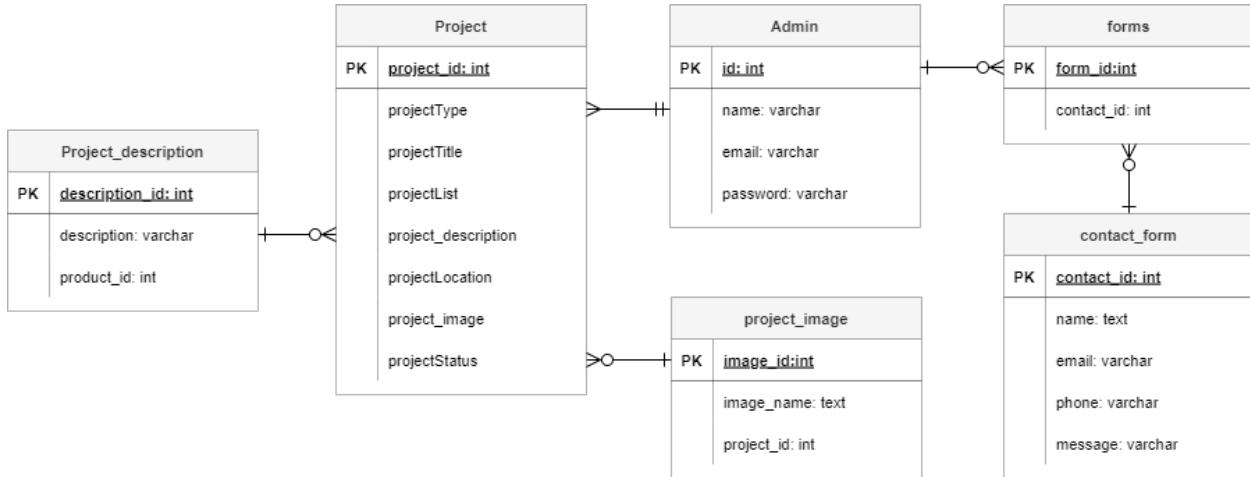


Figure 5.7: Entity Relationship Diagram

5.3.3 Functional and Non-Functional Requirements

1. Functional Requirements

Function	Find a necessary project with details	
Input: N/A	Process: Visit project and project details page	Output: Is able to view all types of projects with details
Pre Conditions	User must have computer or mobile and internet access.	
Post Conditions	User sees the available project and details	

Function	Check company details	
Input: N/A	Process: Visit About Us page.	Output: Company's story, values, mission & vision, and chairman's message are shown.
Pre Conditions	User must have computer or mobile and internet access.	
Post Conditions	User must have a brief idea about the company's background.	

Function	Download Brochure	
Input: N/A	Process: Click on the download brochure button	Output: Brochure is shown and on click redirected to PDF download option.
Pre Conditions	User must have computer or mobile and internet access.	
Post Conditions	User successfully download the brochure.	

Function	Contact Organization.	
Input: N/A	Process: Visit the contact page, fill out the form and press submit button.	Output: Contact form submitted
Pre Conditions	User must have computer or mobile and internet access.	
Post Conditions	User successfully submits the form.	

Figure 5.8: Functional Requirements

2. Nonfunctional Requirements: Nonfunctional requirements are implicit requirements or expectations that describe the features, characteristics, and the attributes of the system. The expected features then might be too subtle for the functional requirements to mention. Non-functionals are required for the system's primary operation.

- **Performance:** The performance of the final product is expected to be top-notch. Even after meeting all the functional requirements, the system needs to load fast. There should be a certainly acceptable delay after clicking any interactive section but that should not exceed too much.
- **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.
- **Availability:** The website should be up and available online 24/7 without having any trouble like broken pages or server errors.
- **Ease of Use:** The website should be easy to maneuver. The design and the functionality should be easy for users of all ages. The posts or sections should not be too crowded and be eyesore.
- **Backup:** Websites are prone to hacking or breaking down due to any server issue. Also while page optimizing some files may end up faulty. There should be regular backups for both database and codebase for such events.
- **Information:** Throughout the website, there should be all relevant information related to the website and its product. Customers must not get confused while browsing the website about what the purpose of the website is.
- **Maintainability:** Necessary sections of the website should be made dynamic for user ease. After handling the product users do not expect to code their way through making a post. Users should be able to create, update and delete data to the live site.
- **Security:** Security will always be a concern for websites. The backend of the site should follow OWASP 10 security standards.

5.4 Product Features

5.4.1 Input

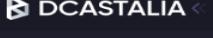
In this section I have added screenshots of two scenarios of inputs, one from the regular users (visitors) of the website and another one from specific users (admins).

1. Customer Feedback Form: A potential customer or user must give the full name, email address, mobile number, and necessary message to the form. A successful message will be shown if the form is submitted successfully.

The screenshot shows a contact form titled "LEAVE YOUR CONCERN". At the top left is the AWR Real Estate logo. The form has three input fields on the left: "Name", "Mobile", and "Email", each with a placeholder text color. To the right of these fields is a larger text area labeled "Message". At the bottom is a blue "SUBMIT APPLICATION" button.

Figure 5.9: Contact Form Input

2. Project Add: A potential admin must go to Page then “List of Page” from where they have to press “add new” and then fill necessary fields like Category, Product Type, Title(slug will be automatically created), and description. Also after the post is created they have to add one picture for their thumb at a selected dimension.

 Hi, Supper Admin SA
Dashboard
Page
Gallery
Category
Product
Menu
Settings
Forms
User Management
Tools
Submitted Forms
Pages
Gallery
Submitted Form
Product
Submitted Forms
Products
Pages

DCASTALIA

Pages

Pages

#	TITLE	TYPE	POSTS	GALLERY	IMAGES	SORT ORDER	ACTION
1	Home(4)	Home	-	-	-	1	
2	About US(6)	-	-	-	-	2	
3	Projects(0)	Projects	-	-	1	3	
4	News & Events(3)	News Events	-	-	1	4	
5	Career(2)	-	-	-	1	5	
6	Contact(4)	Contact Type	-	-	-	6	

Showing 1-6 of 6 items.

Bulk action Save Sort Order

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DCASTALIA

Update Page: Why AWR [Pages](#) • [About US](#) • [Why AWR](#) • Update

General Template Meta Data Image Gallery Images Files Posts Summary Instructions

Parent Page: About US

Type: Why AWR [New](#)

Title: Why AWR

Slug: why-awr

Sub Title: Why AWR

Short Description:

Explore More: Enter page Slug like "/about"

Video Url: <https://www.youtube.com/embed/tgbNymz7vqY>

Date:

Description:

Status: Active

Save & Publish

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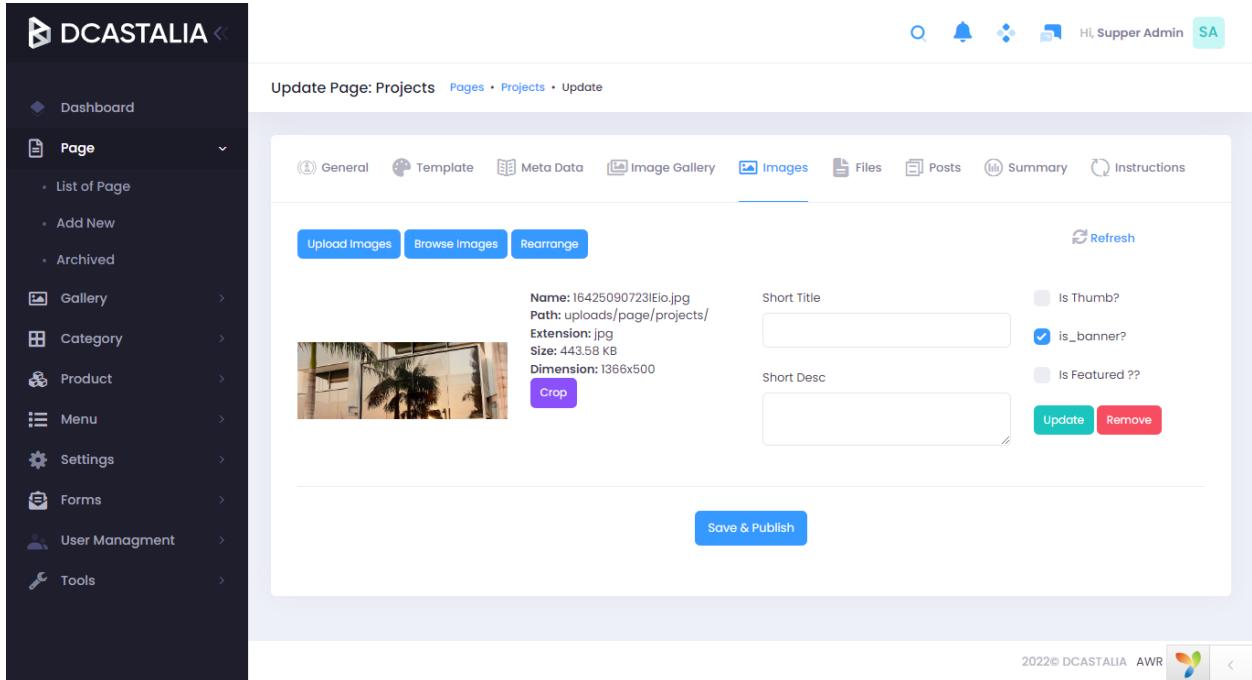


Figure 5.10: Project Add Input

5.4.2 Output

Project Add: The given project can now be seen under a specific project category with its type with all the necessary information given while creating the post.



A screenshot of a real estate website for 'AWR REAL ESTATE'. The header features the 'AWR REAL ESTATE' logo. Below the header, the text 'WHY AWR REAL ESTATE LIMITED' is displayed in large, bold, black capital letters. Underneath this, there is a paragraph of text: 'The creative architectural precisionness and portrayal of the mesmerizing articulation of a structural artistry, is what AWR Real Estate Limited aspires to achieve. Ushering to the aspects of realism through structural enigma is like an appealing ballad of captivating emergence, which AWR Real Estate Limited has subjugated over the years of exquisite expertise ...'. At the bottom left, there is a blue button with the text 'OUR STRENGTHS' and a right-pointing arrow.

Figure 5.11: Product Add Output

5.4.3 Architecture

A web application architecture is a blueprint of an application's components, databases, middleware systems, user interfaces, and servers interacting at the same time. It is also the layout that logically specifies the link between the server and the client-side for a better online experience. 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 that increases app performance even more.

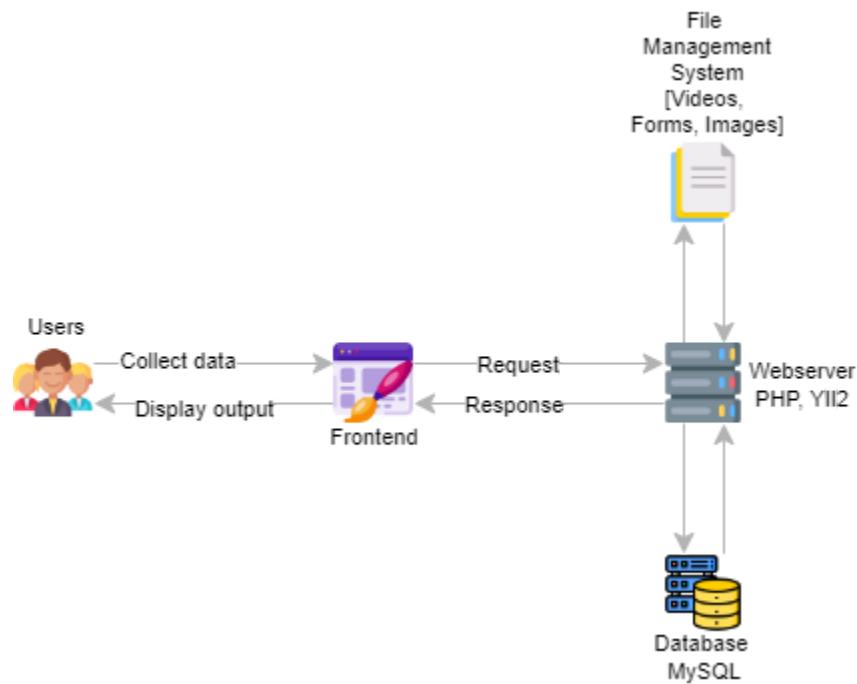


Figure 5.12: System Architecture

Chapter 6

Results & Analysis

6.1 Results

AWR Real Estate Ltd was undertaken with the goal of developing a contemporary website and promoting the marketing and sale of property online. They want to boost their company's exposure in order to attract more clients and develop their business. They thought that having a strong online presence would aid them in their goal since people would have the access to see all their projects. We tailored to their needs and created a website for them that met all of the client's expectations.

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



Figure 6.1: Landing Page

Projects: Projects Menu consists of 3 sections, “Ongoing”, “Upcoming”, and “Completed”. Each section has its own individual list of projects and there is a drop-down option is added, user can select status, type, and location.

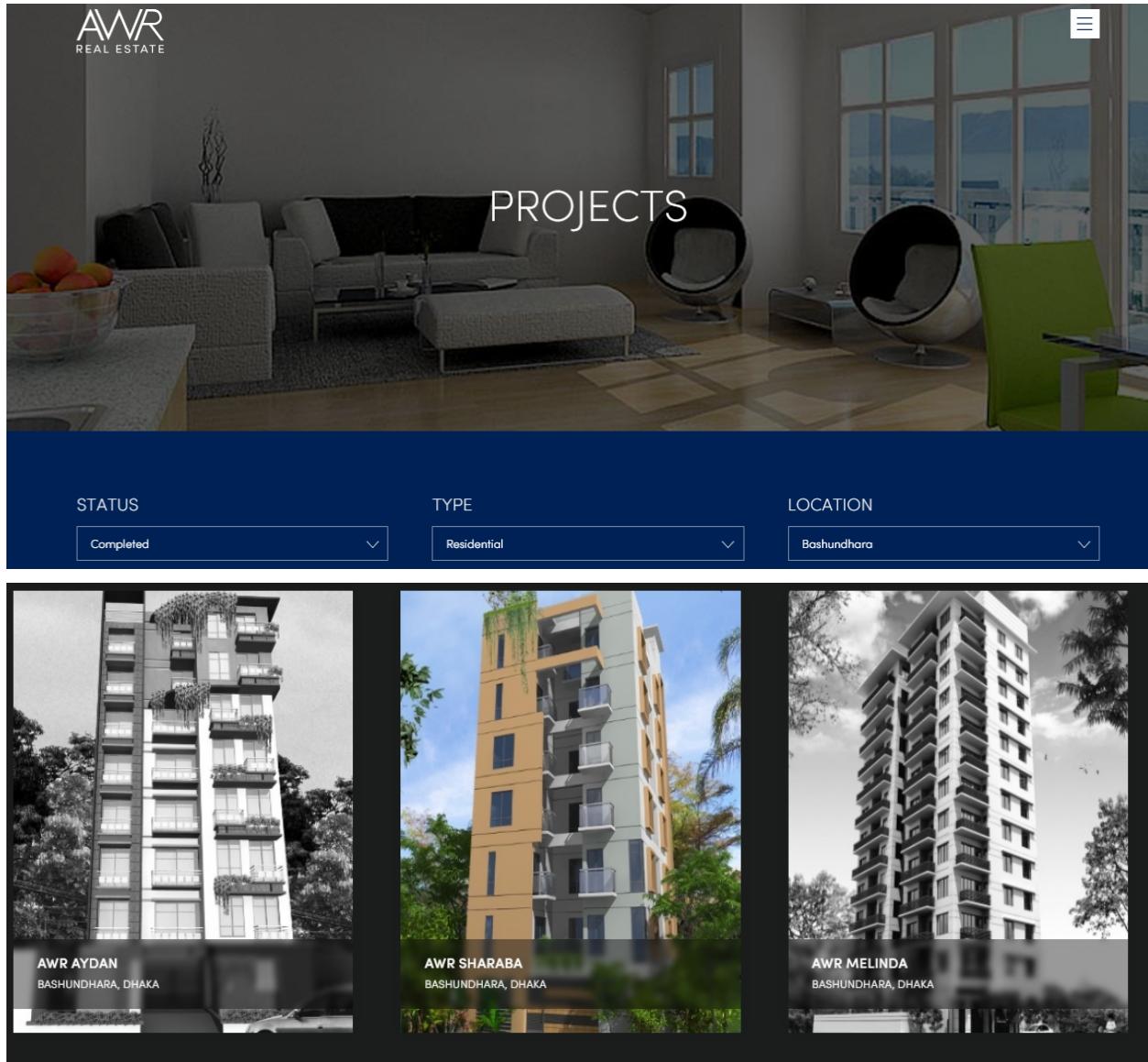


Figure 6.2: Project Page

Project Details: This page shows the individual details of a selected type of project. Details such as projects area, Address, number of floors, floor area, etc

Scrolling down there is a features and amenities section is shown, Following that there is a related project basic features or services provided more details.

AT A GLANCE

Type of project:	Commercial Project
Land Area:	6.23 Katha
Address:	Plot-35, Gulshan South Avenue, Dhaka.
Facing:	Fair-faced
Number of Floors:	G+17= 18
Floor Area:	2,500~2,550 sft with common space



FEATURES & AMENITIES

Sound Proof And Heat Proof Double Glazed Glass

Imported Marble In Ground Floor And Lift Lobby

48"X24" Laser Cut Crystal Tiles In All Floors

3 High Speed Passenger Lifts; Brand - Thyssenkrupp

1 Car Lift, Brand- Doubler.

Sufficient Car Parking Area In The 3 Basements

2 Stairs (You Can Use 1 Stair As Internal For Your Floors)

Latest VRF System Air Conditioning In All Floors

24 Hours Power Backup With 2 Generators Of 800 Kva

Substation Capacity 750 Kva For 100% Power Supply

Full Fire Protection With Modern Equipments On All Floors

Outdoor And Indoor Cleaning Service

24 Hours Security Service, CCTV And Intercom Service

Figure 6.3: Project details Page

About Us: About Us Menu consists of 5 sections, “Overview”, “Management Team”, “CSR”, “Concern”, and “Clients”. This section highlights Chairmen's messages and the company's mission and vision, and core values are elaborated with images and texts, and their social responsibilities to the community.

VALUES

Our performance is driven by the values we uphold and the culture we live by. In AWR, our culture stands on five core values – Excellence, Innovation, Commitment, Quality, and Customer Satisfaction. These values are embedded in AWR's culture and drive the team towards shaping the future.



MISSION

- Utilizing the latest style in the real estate field
- Respecting and upholding the laws of nature
- Embracing technological excellence and changes
- Being always responsive even after-sale



VISION

Keeping a notable footstep and demonstrating an exemplary standard in the field of real estate.

CORPORATE SOCIAL RESPONSIBILITY



We helped corona patients in 2020.

During the epidemic, AWR is deeply invested in assisting afflicted employees, customers, and communities, from impr...



We distributed winter belongings among destitute people.

Winter is a challenging time for those living in poverty in our country. Dhaka, our country's capital, is home to man...



We provided funds to differently-abled children in 2020.

AWR provided BDT 5,00,000 to 'Ashar Alo' school, a philanthropic school for assisting special need-based children...

Figure 6.4: About Us Page

News & Events: Here the company's news and events would be showcased with the date and features images of that particular event or news.

NEWS



Inauguration of UCB 200th Branch at Banani-1

24 Dec 2020

United Commercial Bank inaugurates 200th branch



NRBC BANK

28 Nov 2021

NRBC Bank Bashundhara Branch opened at AWR building

Figure 6.5: News & Events Page

Contact Us: Finally the Contact page. Through this page, users can make contacts with the company. Users can fill in necessary fields and query the organization which can be managed through the CMS by the admin. And then there is a map showing which can be easier to find the company.

STAY CONNECTED

📍 House 4, Road 27, Block J, Banani, Dhaka-1213.

✉️ sales@awr.com.bd

📞 +88 01811 409608

LOCATION

LET'S TALK, BUT YOU FIRST!

Name

Mobile

Email

Message

SUBMIT APPLICATION

Figure 6.6: Contact Page

6.2 Test Case

Software Testing is the process of establishing confidence that a program or system does what it is supposed to. Software Testing is one of the very important software development phases. It is the major quality checking point for software on its production line. We executed a test case to check the quality and operation of the AWR Real Estate Ltd website.

Sl	Case	Action	Precondition	Test Steps	Expected Result	Result obtained	Status	Comments
1	Login	Admin Login	1. Connected to the admin panel through the internet.	1. Add admin information to the user's table in DB.	1. Login into the database and view the dashboard interface.	Login successful	Pass	N/A
			2. Valid login credentials.	2. Fill up the fields and press the login button.	2. Wrong credentials give an error message "Login failed"			
2	Add Project	Admin can add new project	Must be login to the admin panel	1. Put relevant project information in the appropriate fields. 2. Click on the Save button to add a new project	A new project will be added	New project added successfully in the DB and visible on the website.	Pass	N/A
3	Remove Project	Admin can remove a project from DB	Must be login to the admin panel	1. Go to the list of projects. 2. Select the project to be removed. 3. Press on the remove	Project removed from the system and website.	Project successfully removed.	Pass	N/A

				icon. 4. Confirm to remove by pressing confirm button				
4	Update Project	Admin can update the project details	Must be login to the admin panel	1. Go to the list of projects. 2. Select the project to be updated 3. Press on update icon 4. Edits required fields to update. 5. Saves change by pressing the save button.	Project updated from the system and website.	Project successfully updated.	Pass	N/A
5	Logout	Admin can successfully log out	Must be login to the admin panel	Click logout from the user menu in the profile icon.	Log out from the admin panel	Successfully logged out.	Pass	N/A
6	Mobile Responsive	The design and layout is responsive to the commonly used screen size	Any user with an internet connection can view the responsiveness	Visit the website	Design is responsive without breaking the layout	The website isn't Perfectly responsive to all common screen size	failed	Check bootstrap implementation and media query code.
7	Forms	Fill up the contact form and submit	Connected to the internet	1. Visit the website 2. Fill up the form and click submit button	A successful message is shown	A success message is received by the admin.	Pass	N/A

Figure 6.7: Test case

Chapter 7

Project as Engineering Problem

Analysis

7.1 Sustainability of the Project/Work

Project sustainability is currently a widely used method to project management. From project identification to feasibility studies, design, funding, implementation, and evaluation, specific criteria and standards must be established for projects to be sustained. The acceptability, viability, and flexibility of a project will be determined through a sustainability analysis.

The website's long-term sustainability will also be ensured through frequent maintenance of the website and its server which will be done by the maintenance team collaborating with developers. The website's HTML, CSS, JS, and backend code are all nicely optimized. It is ensured that the website works properly and is easily accessible by users regardless of the device's specification by minimizing repeated codes, minifying all the CSS and JS codes that are utilized, and keeping suitable coding standards. In terms of style and layout, the website is meant to be user-friendly, with a focus on the User Experience. Visitors with less computer experience will be able to access and navigate the website with ease. The media files, such as photographs, videos, symbols, and logos, have all been optimized to guarantee that the pages load quickly, allowing individuals with low-end devices and sluggish connections to visit the website.

7.2 Social and Environmental Effects and Analysis

The Website of AWR Real Estate Ltd displays all of its ongoing, upcoming, and completed projects, and customers may quickly use the website to acquire information about certain types of projects. This saves individuals time by allowing them to gather information online rather than visiting many apartments physically to make a decision. People may do this from the comfort of their own homes rather than sitting in city traffic

for hours, which eventually saves fuel, meaning fewer cars on the road, which helps lessen pollution created by automobiles.

Just like all the other websites that are developed at Dcastalia, this website is designed and developed to maximize efficiency while utilizing fewer resources. We attempted to optimize our code and media material to the greatest extent feasible. In our office, we are constantly mindful of avoiding wasting electrical energy. This allows us to be more energy-efficient while also reducing our use of paper, which has a beneficial impact on the environment.

7.3 Addressing Ethics and Ethical Issues

When a system is being developed, one of the most important issues is the security of the system. Through the system, a lot of data will be continuously exchanged and as a developer, we have to make sure that the data are well protected and the users can use the system without the fear of being hacked or getting their data leaked. All the security-related work is done by the senior developer.

The company has taken many security measures for this system. All the necessary documents and source codes are kept private by the company. Only the team leader has the ability to access those data with valid credentials, this ensures data security

Chapter 8

Lesson Learned

8.1 Problems Faced During this Period

It was tough for me to do six days' office from 10.00 am to 7.00 pm while continuing three other courses. I always tried to give my 100 percent effort during my internship periods. Adapting to the team, as this was my first time working in a work environment where everyone contributed to as a collaboration, it was hard to get used to everyone. Throughout the Internship, I have faced new challenges and I also learned how to overcome those. For the current pandemic, getting an Internship was very difficult.

I never worked in a professional place before. I was never a 10 am- 7 pm routine person, so the new lifestyle was a bit problematic for me. Sometimes I cannot cope-up with immense work as I wasn't used to this kind of pressure.

It was also difficult to master so many new technologies in such a short period of time and get with the flow of the other developers and working as a team. Every project here has very tight scheduling and each section has deadlines. Meeting those deadlines as well as learning the new features was very challenging. Also, It was really difficult to study and apply the knowledge in such a short period of time. It was exhausting for me to keep up with the team's experienced developers' fast pace.

8.2 Solution of those Problems

During my internship period I have gained new knowledge, skills, and met so many new people. I had to google and find out a few of the parts in the report that I was not familiar with. My supervisor helped me a lot when I faced any difficulties in the codes. At first, he have given me a total overview of the project. The internship was also good to find out what my strengths and weaknesses are. I learned about Customer Requirement Analysis, User Experience Design, Code igniter, and Structures of data, etc. Now I know how can I make a project successful and what are the requirements.

Chapter 9

Future Work & Conclusion

9.1 Future Works

AWR Real Estate Ltd intends to add many additional features to the website as the project proceeds in order to make it more useful to users and appear more attractive. It is very likely for every project to make additional developments after the final deployment based on the user requirements that are observed via Google Analytics for a period of time. From my point of view, there can be promotional project listing pages where projects with occasional sales can be displayed and statistics pages where customers can get accurate and insightful data about the organization.

9.2 Conclusion

It was a wonderful experience working with Dcastalia Ltd. As a web developer intern. During the internship period, I collaborated with my mentors and seniors to solve obstacles. I've also learned how to work within tight deadlines and under pressure. The project assigned to me helped me learn many things about web development, such as JavaScript, HTML, CSS, SASS, Bootstrap, and many other tools. The internship program enabled me to handle clients as well, asking for their requirements and understanding their issues. This internship has given me the opportunity to learn more about the development environment and market.

I would like to appreciate once again everyone who has made my life as an intern such a great experience.

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