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# An Undergraduate Internship on Self-learning Application

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Independent University, Bangladesh

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### Kalam Realestate Website

By

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Summer, 2022

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### September 17, 2022

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 certified that, Kalam Real Estate website is completed by Israt Zahan Mim ID no 1731078, to fulfill the requirement to the compilation of the project of Computer Science and Engineering from Independent University, Bangladesh (IUB) in the supervision of Mohammad Motiur Rahman Sir. I make sure to learn how to work in office environment and how to work and learn how to use my education in real workplace from my office supervisor Salman Kalam sir during my Internship period.

Signature

Date

Write Your Name Here

Name

# Acknowledgement

I would like to express my special thanks of gratitude to my teacher Md. Motiur Rahman Sir as well as my office supervisor Salman Kalam Sir who gave me the golden opportunity to do this wonderful project of developing a website named Kalam Real-state website which also helped me in doing a lot of Research and I came to know about so many new things I am really thankful to .

Secondly, I would also like to thank my parents and friends who were there to help me a lot in finalizing this project within the limited time frame.

# Letter of Transmittal

Mr. Mohammad Motiur Rahman

Lecturer,

Department of Computer Science and Engineering School of Engineering and Computer Science Independent University, Bangladesh

Subject: Submission of Internship Report.

Dear Sir,

I am submitting my Project report, which is part of my earning Bachelor and Engineering curriculum. It is a great achievement to work under in your supervision. The report is based on making a website for a company during my internship. I had opportunity to work on Kalam Real Estate and Company for three months, under supervision of Salman Kalam, CEO of this company. This Internship has given me both academic and realistic exposure. It also given me the opportunity to improve the network and business environment. I tried to make this report as informative as possible with the information I have gained during my internship. In order to prepare a formal internship report, I follow the guidelines and explain the required fields in sufficient detail, however, I sincerely believe that this report will serve the purpose of my learning. I will be very responsible if you are kind enough to receive this report and provide your important judgment. It would be my great pleasure if you found this report helpful too for the information to have a clear view of the matter.

Sincerely Yours, Israt Zahan Mim ID: 1731078 Department of Computer Science and Engineering Independent University, Bangladesh

# **Evaluation Committee**

Signature
Name
Supervisor
Signature
Name
Internal Examiner
Signature
Name
External Examiner
Signature
Name
Convener

# Abstract

The report is broadly categorized into eleven different chapters. At first there is the Overview of KRES (Company Profile). Then in the first chapter there is the Introduction part which contains Background, Objectives of the Project, Scope and out of Scope of the Project. Chapter two focuses on Literature Review. I have discussed how the project is related with undergraduate courses. Related works, global market analysis and other parts are described here. Chapter three discuss the methodology. I have discussed about Customer requirement analysis; it also describes Design and Implementation phases of the project. Chapter four will tell about Project Management Financing. It contains Work Breakdown Structure (WBS), Time Distribution, Gantt Chart, Recourse Allocation and Estimated Costing. In chapter five, Project Details is described with Description (Existing System and Proposed System). System Analysis and System Design is described here in chapter five with rich picture and process diagram. It also contains requirement specification and product features. Chapter six will discuss the testing process and chapter seven will discuss about problem analysis. In the last chapter narrates a concluding summary. In this internship report, Development of a website providing services to customers in a real state company. This system will save user's time. Now anyone can use to use the website and book any kind of furnished or non furnished apartments with just a few simple clicks.

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Six Element Estimate Costing Input test case Output

# Introduction

Internship is thought on addition a few encounters from the different a few associations which will encourage bounty to make a connection between the hypothetical and reasonable data.

It includes profitable ability like usable working environment on computer instrumentation, taking care of a spread of things in the meantime, sorting out or dissecting learning, spending plans or rising collaboration, composing, and talking gifts. Usable work environment on co muter instrumentation, composing, and talking gifts. It's indispensable to get a handle on the best approach to impart data to outsiders, managers, and companions.

While doing an undergraduate program in computer science and engineering at l Independent University Bangladesh, I considered a few programming courses Last 4 years. Be that as it may, this is frequently not happy to get a handle on the web developing because of it's an extremely huge marketplace. to encourage a sound data concerning programming which has net application style and Development. I'm intrigued to attempt and do entry level position in Kalam Real State Company. This entry level position report covers the whole temporary job time that I have finished with progress concerning the coding, style and improvement.

### 1.1 Overview/Background of the Work

Kalam Real State Company has few websites that are already developed. But the disadvantage of those previous websites are there is no option given where a customer can book an apartment online through the website. Rather than that the websites were not that much informative and there were no options of selection, customization etc. On this new developed website, it's much easier to use very user friendly. Here a customer not only can book a flat online but also can customize furniture along with all the house hold things according to their preferable choice.

### 1.2 Objectives

In general, a project objective describes the desired outcomes of a project. Objective of a project is specific, measurable and must meet time, budget and most importantly meet the client's requirements. The main objectives of this website are described below:

Time efficiency:

Using the website user can save time by booking though online process using this website all updates and information are organized here, so user can easily check their required needs in a short time.

User friendly interface:

The user interface is very easy to use, user can easily use this website just following the instructions Make task easier: The website will make their every task easier to complete. For example, now they are website from any browser to check any notice, they can easily check if their booing is confirmed or if they need to add any services any notice by only one click on the website.

Online Platform:

The website will work as an online services system for all national and international customers.

#### Linked with website:

user can easily visit required page of their website by the application. They will also can go through the website and select all their services and book them or can choose if they need more services .

### 1.3 Scopes

- Add properties
- View property
- Inserting new property details
- admin log in and log out
- Inserting form and editing

# Literature Review

#### 2.1 Relationship with Undergraduate Studies

An internship is professional training in a safe and structured working environment that encourages the mentor-maintain relationship. A typical internship program assigns interns to a mentor or one of the experts in the field from whom you can learn from. Mentors train and give professional advice to their interns on how to navigate workplace culture in a specific industry. Internships are designed to help you develop work habits that will lead to your success. It is the practical experience of the courses a student has done in his undergraduate period. My project is directly and indirectly related with few courses I have done. Here I am describing the relation of the project with my undergraduate courses. These projects helped me a lot in my internship period. The project is fully based on the knowledge I gained in the course.

Throughout All My university courses I've also learned about website development. How to make a complete website and how to design a website. I've also learned about how to add new features in a website.

Web Applications and Internet (CSE309/CSC454): I have done Web Applications and Internet course under Lecturer Sanzar Adnan Alam sir. Web application and internet is a basic course for an intern in computer science and engineering student. The project is not directly related to the project, but the project is linked with website of PLSCR. And in few cases the screen view is not responsive. To overcome the issue, I have to update the website and I learned web development from this course. Like other courses I also have done few projects based on web application and internet. Personal Portfolio, Company Website and few other projects helped me a lot in learning web development. Database Management (CSE303/CEN401/CSC401): I have done Database Management course under Abu Sayed sir. This course is a pre requisite course of Mobile Application Development and Web Application Development. I leaned about php, MySQL and XAMPP from this course. Without a basic knowledge in Database Management is not possible to work in a project containing real time data. Entity Relationship Diagram, Rich Picture, Process Diagram, Rich Picture, SQL and many other key parts of database management were taught here. These concepts helped me a lot to complete the project.

Object Oriented Programming (CSE213/CEN305/CSC305): I have done Object Oriented Programming course under Subrata sir . In this course I have completed a few projects. This project helped me a lot to learn Java

The project is also connected with few other courses. It is like, I learned one think from any course and realizing the use after years while working on it in practical project. The Website Development is Directly Related To Web Applications and Internet, Database Management courses are also related with the project. The project is also indirectly related with few courses. For Example;

- Data Structure
- Digital logic design
- Database
- Algorithm
- System analysis
- Data communication

### 2.2 Related works

• BD Housing : bdHousing has been the dominant frontier of online real estate marketplace for the last 17 years, bdHousing occupies a common platform for property owners, whether individual or company, to promote their properties for sell, rent, property seekers, who are looking for property for sale in Bangladesh.

• B Property : Bproperty is a real estate service Provider Company. It is used for search, renting buying Properties. Property is part of the Emerging Markets Property Group which also owns top UAE property portal Bayut.

• OiiO Property: OiioProperty.com Founded in 2015, with the objective of simplifying property buying selling Online. It is an intermediary offering its platform to facilitate the transactions between Seller and Customer/Buyer/User.

• Rents.Com: Rents.com acts as a matchmaking service for sellers and buyers by putting them in touch with each other. They strike a deal With both the buyers and sellers of the property. They help both people by being a good mediator.

# **Project Management & Financing**

Work Breakdown Structure A sequential structure that shows the division of the project into smaller parts is called a Work Breakdown Structure (WBS). In this project, we have produced WBS so that our work is integrated. WBS covers views of all scopes, risks, points communication, obligations, costs and guarantees that do not exceed value delivery. By combining mindfulness and collaboration, it is the right tool for the team. In this case, the WBS was used the way to the top. Breaking work into smaller tasks is a common productivity technique used to make the work more manageable and approachable. For projects, the Work Breakdown Structure (WBS) is the tool that utilizes this technique and is one of the most important project management documents. It single handedly integrates scope, cost and schedule baselines ensuring that project plans are in alignment.

Here we need that 4 days are required to plan the entire project of what type of project it is, what languages and framework(s)(if any) is/are needed to build it and how. This project consists of little date comparatively days is enough. Cost schedule has been collected by the supervisor. Designing the front end took 21 days. The most extensive work is implementing as all the design and back-ends will be implemented in a framework, in this case Laravel and react. Finally, after implementing, testing will start and 7 days is needed for testing the whole application and finalizing it for public release. The following project will be deployed by 24th April 2022 and released by 1st of October 2022.



### 3.1 Work Breakdown Structure

### 3.2 Process/Activity wise Time Distribution

In order to complete the project within the estimated time needs a process/activity wise time distribution. This distribution will help to organize all task as it will be divided into sections to make it work more efficiently. Besides, a person can work with more flexibility and easily when the entire project is divided into sub groups. The most important challenge in designing the right way application time management. Therefore, the content should fix, and progress must be based on this context. A better time management can lead to take less time to complete a task related to project.

### 3.3 Gantt Chart

	Week 1	Week 2	Week 3	Wesk 4	Week 5	Week 6	Week 7	Week 8	Week D	Week 15	Week 11	Wrek 12
Project Management	7day											
Planning		a										
Design			14	Slays								
implementation						· · · · · · · · · · · · · · · · · · ·	42 (	inys				
Testing											7 days	
Deployement												Salars



### 3.4 Process/Activity wise Resource Allocation

### 3.5 Estimated Costing

Employee	< · ·		1. î.	1.00		. ::)	1.1	Total	Hour	Total
		, <sup>11</sup> - 1	1.0	.1.1	11 . <b>)</b>	1.20	1 × 1	Hour	Cost	Cost
										(BDT)
Intern	4	4	4	8	8	4	4	36	100	3600
Android										
Developer										
Web				2	-	-	4	6	200	1200
Developer										
System	4	4					4	12	400	4800
Analyst										
And MD										
Others										400
Total										10,000

Resource allocation is the process of assigning and scheduling available resources in the most effective and economical manner. Projects will always need resources and resources are scarce. The task therefore lies with the project manager to determine the proper timing of those resources within the project schedule. Resource management is prone to

several challenges that developer needs to be aware of to properly allocate resources and manage them throughout the project.

# Methodology

When it comes to developing websites, there's not one single method or approach that IT companies can use. There are actually several different website methodologies that development teams can turn to, each with its own pros, cons, and unique features, 4 popular Website Methodologies are,

1.Waterfall

2.Agile

3.Scrum

4.Kanban

From these methodologies I used Waterfall.

The waterfall model is considered the most basic and traditional software development methodology. The waterfall model consists of phases (requirements, design, implementation, verification, maintenance) that are carried out in sequence and focus on specific tasks for each phase. Each phase must be completed before the start of the next phase. Once a phase is complete, there is no going back to that phase for modification.

The waterfall method is easy to manage due to its sequential nature. Projects which have the requirements and goals clearly defined which are not expected to change are the best to be implemented in a waterfall approach. The waterfall is very tight and rigid which results in the process being slow and may be costly. Methodology is an in depth little by little method that identifies, technique and examine diversity of facts approximately particular subjects. It involves analyzing the manner

of how the proposed machine works and switch it to in a platform with more simplified efficient of that gadget. The web utility that i have been operating on, on my internship, used the concept of methodology to feature numerous features and functions to the internet site to make it extra bendy for the customers.

# Body of the Project

#### 5.1 Work Description

The Purpose of this project was to build a website for customers and the company so that the customers can book their desire flats or home easily where they are. The body of the project shows what is being done, how it is done, what the results are, and what conclusions and recommendations can be made. This Website is for a real-estate company where they can build a relation with their customers through website. Customers can know about this company more from their web-page.

It is a customer friendly website so that they can easily use this website and there is a detail about the properties and there are details about properties and log in sign out system and dashboard. The body of the project basically shows what the project is all about. There is an admin account from where admin can log in and log out.

### 5.2 Requirement Analysis

Requirements analysis is also known as requirements engineering, is the process of determining user expectations for a new or modified website. These features, called requirements which have to be quantifiable, relevant and detailed. In software engineering, such requirements are often called functional specifications.

#### **Rich Picture**

The rich picture is a graphical tool that produces cartoon like representations of problem situations within organizations. Knowledge is gained from multiple stakeholders and differing viewpoints usually within a workshop context. A rich picture is used as one of the 3 primary tools in his soft system method maintaining that it must not be structured. The rich picture tool is popular amongst many analysts but has been increasingly criticized over the years for its lack of syntax, structure and rules.





#### Functional and Non-Functional Requirements

Functional Requirements:

1. Function: Login

Actor: Admin

Scenario:

- Input Admin Email and Password.
- Check User Email and Password.

• Remember Password.

Exception:

- Required page not found.
- No database connection.
  - •Precondition:

• User must be registered in this system, then he/she should able to login the system. Post condition:

- Successful: Valid user login and refer to the home page.
- Unsuccessful: Display correction message. Incorrect email or password, please try again.
- 2. Function: Add Property

Actor: Admin

Scenario:

• Input the required inputs of property Exception:

- Required page not found.
- No database connection.
- This data format is not allowed
- Required the field
  - Precondition:

• Admin data must be in this system, then he/she should able to login the system. Post condition:

• Successful: The property has been uploaded successfully and reload to the add property page.

• Unsuccessful: Please fill up the required fill.

3. Function: Add Multiple Image

Actor: Admin Scenario:

- Input the multiple image of selected property Exception:
- Required page not found.
- No database connection.
- This data format is not allowed
- Required the field

Precondition:

- Admin data must be in this system, then he/she should able to login the system.
- Selected Property data should be valid Post condition:
- Successful: The image has been uploaded successfully and reload to the add Property Image page.
- Unsuccessful: Please fill up the required fill.
  - 4. Function: Edit Property

Actor: Admin

Scenario:

• Input the field

Exception:

- Required page not found.
- No database connection.
- This data format is not allowed
- Required the field

Precondition:

- Admin data must be in this system, then he/she should able to login the system.
- Selected Property data should be valid Post condition:
- Successful: The property has been updated successfully and reload to the view Property page.
- Unsuccessful: Your request is failed.

- 5. Function: Delete Property
- Actor: Admin

Scenario:

- Select the items
  - Exception:
- Required page not found.
- No database connection.
- $\bullet$  Required the field

Precondition:

- Admin data must be in this system, then he/she should able to login the system.
- Selected Property data should be valid Post condition:
- Successful: The image has been Deleted successfully and reload to the View Property page.
- Unsuccessful: Your request is failed.

Non Functional Requirements:

Performance-This system can work very fast and. It has better design to get better performance at peak time. Safety-Safety issues are important for every system. Our system ensure that customer data should be hide. Security-This is important to the level of security. Quality-It is one of the best platforms to buy a picture/image/photo of reasonable prize and also ensure best quality. Availability-The system should be available at all time. Usability-The system should satisfy a maximum number of customer needs. Re-usability -This system can be reused in another application. Maintainability-Customers orders should receive the correct and proper way. Search-Defining how quickly the system will return search result. A non functional requirement will define how well it will display the functional behaviour. https://www.overleaf.com/project/6324c4bfc0ffb052c5bf8a28 -Benefits of non functional requirements:

-Better code quality

-Better security

### 5.3 System Analysis

System analysis is a problem-solving process that involves looking at a broad approach approach, segmentation, and finding out how they work to achieve a goal. It is used in information technology, where computer-based systems need to be configured once design analysis.

### 5.3.1 Six Element Analysis

	Process	User	Computing	External	Required	Database	Network
			Hardware	Hardware	Software		Communicatio
	Login	To access	Desktop,	Mouse,	Internet	MySQL	Internet,
		the admin	Laptop,	Keyboard	Browser		Domain,
		panel, user	Tablet,				Hosting
		must need	Smart				
		to login	Phone				
		with email					
		and					
		password					
	Add	• Login into	Desktop,	Mouse,	Internet	MySQL	Internet,
	property	the system	Laptop,	Keyboard	Browser		Domain,
		as admin	Tablet,				Hosting
		• Input the	Smart				
		required	Phone				
		inputs of					
		property					
Ac	ld	• Login into the	Desktop,	Mouse,	Internet	MySQL	Internet,
M	ultiple	system as	Laptop,	Keyboard	Browser		Domain,
In	nage	admin	Tablet,				Hosting
		• Select the	Smart				
		specific	Phone				
		property					
		• Upload the					
		images					
Ec	lit	• Login into the	Desktop,	Mouse,	Internet	MySQL	Internet,
Pr	operty	system as	Laptop,	Keyboard	Browser		Domain,
		admin	Tablet,				Hosting
		• Select the	Smart				
		specific	Phone				
		property					
		• Change the					
		input field as	Page 15 of 3	3			
		needed					

•	Login into	the	Desktop,	Mouse,	Internet	MySQL	Internet,
	system	as	Laptop,	Keyboard	Browser		Domain,
	admin		Tablet,				Hosting
•	Select	the	Smart				
	specific		Phone				
	property						
•	Delete	the					
	items						
	•	<ul> <li>Login into system admin</li> <li>Select specific property</li> <li>Delete items</li> </ul>	<ul> <li>Login into the system as admin</li> <li>Select the specific property</li> <li>Delete the items</li> </ul>	<ul> <li>Login into the Desktop, system as Laptop, admin</li> <li>Select the Smart specific</li> <li>property</li> <li>Delete the items</li> </ul>	<ul> <li>Login into the Desktop, Mouse, system as Laptop, Keyboard admin</li> <li>Select the Smart</li> <li>Specific</li> <li>property</li> <li>Delete the items</li> </ul>	<ul> <li>Login into the Desktop, Mouse, Internet</li> <li>system as Laptop, Keyboard Browser</li> <li>admin</li> <li>Tablet, Tablet, Select</li> <li>Select</li> <li>the Smart</li> <li>property</li> <li>Delete</li> <li>the Internet</li> <li>Internet</li> <li>Internet</li> </ul>	<ul> <li>Login into the Desktop, Mouse, Internet MySQL</li> <li>system as Laptop, Keyboard Browser</li> <li>admin</li> <li>Tablet, Tablet, Select</li> <li>Select the Smart</li> <li>property</li> <li>Phone</li> <li>Internet Internet Internet</li> <li>Delete the Internet Internet</li> <li>Internet Internet</li> <li>Internet Internet</li> </ul>

fig:5.3:six element analysis

#### 5.3.2 Feasibility Analysis

Possible studies show the functioning of the system vision, it will help: to explain the goals and objectives of building a system in the most efficient, developmental way the best plan and practice. Observation is used to determine which one mental functioning, which includes ensuring that the work is legal and professional possible in addition to economic forgiveness. We will be able to see whether or not what is being done is really worth the support — in a few cases, the business may not work.

The new work system needs to hear whether it is possible to think about it for a specific end purpose to produce a productive effect. This is advised on all issues that can be, in particular, performance or financial matters and how to resolve them by introducing new technologies, operations and financial skills in their project. The most important research feature is the possibility find out if the project has a good chance of success. Split spending compare client needs and more. There are many types of research possible such as operational, technical and economic aspects.

Some of the terms of feasibility analysis are as follows:

• Technical Feasibility: Technical Feasibility looks at small components of how to transfer the object or organization (i.e., equipment, work, delivery, the business will find out what areas, development needed, etc.). Think of a technical feasibility study such as strategic planning or strategy how your business will create, store, transfer, and track its products or services. Technical competency research is an incredible and long-term research tool harvest planning. With a few features, it completes as a framework for your product resources grow and you go about your business for your physical gain your market. Also, do not say that the performance of the technology is about how you will deliver product or service.

• Operational Feasibility: Potential Performance is part of the problem-solving problem with the support of another proposed program. It helps to use open doors and satisfies the condition as dividing the time between project development. It is important to know that management and clients support the work. There they are the six pieces of structure that can cause the division of performance issues to be resolved. They are performance, knowledge, economy, control, efficiency and resources with a clinical management plan the project must focus on something complete the goal of success.

• Schedule Feasibility: Schedule Performance is indicated as a project opportunity completed during the allotted time. In case the project is of a high standard Chances of lust ending after a fixed date, at that time the possibility of a schedule it is thought to be high. The possibility of a schedule ensures that the project can be completed before a project or technology expires or has no purpose.

• Economic Feasibility: The id function of the economic feasibility study is shown the total benefit of the proposed project to tolerate or distribute electrical goods / benefits, to combine benefits and costs with the agency, in another case. offices, and the general public.

#### 5.3.3 Problem Solution Analysis

Problem solving involves thinking and understanding. Although it may seem easy, identifying a problem can be a challenging process. One of the main problems is dealing with them top with a variety of changes in technology day by day. Troubleshooting is an act of to explain the problem; to find the cause of the problem; identification, prioritization, and choosing alternative solutions; and apply the solution. And so is the congress gaining additional needs is important Solutions of a problem can be found by using the following methods:

• Define the problem: Check the situation to focus on the problem, not just its symptoms. Practical ways to solve problems include using flowcharts identify the expected process steps and cause-effect diagrams to be defined and analyze the causes. The sections below help explain how to solve important issues steps. These measures support the involvement of interested parties, the application of facts knowledge, expected comparisons and realities, and a focus on the causes of a problem

• Evaluate and select an alternative: Skilled problem solvers use a series of consider-

ations when choosing the best option.

• Implement and follow up on the solution: Leaders can be called guide others to use the solution, "sell" the solution, or facilitate implementation with the help of others. Involving others in use is an effective way to gain acquisition and support and reduce resistance to subsequent changes.

#### 5.3.4 Effect and Constraints Analysis

Effect:

Without a real time messaging system, it is difficult to maintain communication between people very easily. Maintaining conversations and remembering them and never forget is not an easy task. Almost everyone forgets their conversation with others after a certain period of time. With the help of an online messaging system/platform, a person can never forget any conversation with other people as the conversations are recorded and kept private so that only the eligible users can view the conversations.

#### Constraints Analysis:

Limitations can be used to determine the desired structure of web document, and embedded behavior of applets. Introducing the program formats in which both the author and the viewer can set the parameters of the page layout, some are required and some are optional. This is the last look of a web page the result of a dialogue between the author and the viewer, in which this dialogue takes place without resolving a set of required and preferred barriers for both parties. We identify two sound system structures, based on different classification methods the task of resolving issues between a web server and a web client. Finally, we define the implementation of a prototypebased constraining web authoring system and viewer, viz and provides limited embedded applets.

### 5.4 System Design

System analysis is a process of collecting and interpreting facts, identifying the problems, and decomposition of a system into its components. System analysis basically conducted for the purpose of studying a system or its parts in order to identify its different objectives. This is a problem-solving technique that improves the system also ensure that all the components of the system work efficiently to accomplish their own purpose. Integrated Modeling Language (UML) is a common, evolving target language, which exemplifies the field of software engineering aimed at providing quality. how to detect system configuration. Any complex system is better understood to make some kind of drawings or pictures. These drawings have a better effect on us understanding. If we look around, we will see that paintings are not a new concept but it is widely used in different ways in different industries.

#### Use Case Diagram:

A usage case diagram describes how to use it charges were made. For example, let's explain the charge for using a Withdrawal. This the process is done in many steps, such as Enter card, Enter PIN, Select value, take withdraw money and issue a card. Of course, all these services come from customers opinion - but this sequence should not be included in the use case diagram. Other drawings are recommended for that, like a work sketch. A working case diagram should describe the desired function of the system and associate it with the use of cases and characters. Thus it can represent the existing ideas of the system and how it is interpreted in a different way - only then can the needs be fully understood.

#### UML Diagrams





#### Architecture

A website is a program that uses an Internet browser to do something accorading to the user which Comes with middleware and UI that connects both client, server, and details (domains).

While backend scripting saves data, frontend transfers that data to consumers who support data exchange. In simple terms, the design of a web application is a way The system works during your daily browsing - enter the web address, view site, and communication - while the browser is transferring data to the server.



fig:5.3.4 Architecture

Since the user submission interacts with the front-end, the front-end receives input requests and transfers it to a web server that handles that request using the required intelligence using the website and/or file system where required. And finally he came back feedback returns at the end where the user can see it as an output.

### 5.5 Implementation

### 5.6 Testing

#### Input

	Inputs of "Real estate website"				
Process	Field Type	33			
Login	User email-string Password-string	8			
Add property	Property Title-string Property Type-string Land area-integer price-integer Address-string				
Add property Image	image-text				

### Output

Outputs of	" Real estate website"
Process	Field Type
Login	On Success-Redirect to Admin Dashboard On failure-show the following error message : "Pls Enter Valid Email or Password".
Add property	On Success-property is Added Successfully On failure-show the following error message : "Unable to add property .there was an error".
Add property Image	On Success-property image is Added Successfully On failure-show the following error message : "Unable to add property image,.there was an error".

Test ID	Test Case	Test Purpose	Test Step	Expected result	Actual result
1	Log in	User need to successfully login to the system	1.Go to website 2.Enter email and pass 3.Click login	Login with given permission	Successfully login to the admin dashboard
2	Add property	To test property is added in the website	1.Click add property 2.Fillup property form 3.Click submit.	Property should be added	Property in added Successfully
3	Add Property image	To test property image is added	1.Click add property image 2.Select room tittle 3.Upload image 3.Click submit.	Property image should be added	Property image is added successfully
4	View Property	To test all property can view	1.Go to website 2.Click view property	User can view property	user can view property Successfully

Designing Test Cases

#### Test Results

On one web page: "Kalam Real Estate", all features once activities are analyzed and evaluated as well as progress that is passed step by step. Debugging the app has made a significant and significant change in both ends and application back-end enhancement. There were various cases to prove that they were done exactly as planned from the beginning. The project did not move further progressively developed until each test returns the expected output. Through this method, the application is made gradually and lively.

# **Results & Analysis**

Software testing can be defined as a software verification process or the application has

no interruptions, meets the technical requirements as directed structure and development, and meets the needs of consumers effectively and efficiently with help to manage all unusual situations and limitations In the world of continuous software development, developing a website challenged to remain agile while consistently finding and eradicating user-critical bugs. A myriad of new devices, OS updates, and localization challenges make their jobs that much harder. Creating smart and efficient website test cases help QA and dev teams uncover issues that impact the user experience. All the features which are discuss in the functional requirement will be tested.

According to the detail features, description, constraints of the website below functionalities will be scope of the testing:

- Admin
- Home
- Properties
- about
- Login
- Dashboard
- $\bullet$  Contact
- Properties detail
- Add Property
- Add Property Image
- Review
- Send Message
- Sign in
- Sign out



fig:6.1:Front page





fig:6.2:About us

Login	
Email address	
admin@gmail.com	
Password	
Login	

fig:6.3:Sign in page



fig:6.4:Dashboard page

# Project as Engineering Problem Analysis

Project as Engineering Problem Analysis,

The problem can be solved by carefully analyzing and producing but solutions to the problem and then decide which one would be the most appropriate solution. Building a problem tree, identifying a major problem with cause and effect, and creating multiple functional solutions is known as engineering problem analysis.

Project sustainability is a business approach that balances the environmental, social, financial aspects of goal-oriented activities primarily to achieve the participants' best interests without compromising or burdening future generations.

This is a website designed to work on a desktop or laptop computer or even on mobile phone However, if necessary, it can be upgraded as a website as most people in Bangladesh today have smartphones more than ever and will feel more flexible than using a computer this website can be used anywhere using a server.

### 7.1 Sustainability of the Project/Work

We have found 2 sustainability in this project and those are financial and organizational sustainability.

Financial Sustainability:

Sustainable finance is defined as investment decisions that take into account the environmental, social, and governance (ESG) factors of an economic activity or project. This means how the website costs will be managed after the website is issued. The operating costs of this domain, server is issued here. Organizational Sustainability:

It is the ability of an organization to maintain and be consistent in its mode of operandi, which in turn lead to increase in performance, profitability, enhance customer and workers satisfaction as well as competitiveness among its peers. As it has many options, the website will be updated with minor changes with the following upgrade. We can therefore say that the following website is invited by the organization.

### 7.2 Social and Environmental Effects and Analysis

Environmental and social impact assessment consists of a multidisciplinary approach, which combines the evaluation of the economic aspects of a project - based on cost-benefit ratios with the environmental consequences of undertaking the project. If we are examining on the base of cost and effectiveness, we will get 2 facts and those are environmental effectiveness and social effectiveness. Here are the details about it.

Social Effectiveness:

Connected with the people through using this website inside Bangladesh and outside of the country. People can be connected with this website when they are in need and by using different technologies using phone number of mail and with the admin people can be connected and they can let they admins know what they want according their want admin can work.

Environmental Effectiveness:

As we know with the word with environment is that how this website is helpful with human being or mankind and it can help us with our nature also. Variations in message effects

variables are caused by the intrinsic features of the message. The relationships among these two types of variables and persuasion outcomes would thwart progress in understanding of the effects of message features on persuasion, and understanding of the persuasion

### 7.3 Addressing Ethics and Ethical Issues

Websites are unlike other forms of advertising in a few key areas. Because websites are readily accessible to people all over the country and world. Because websites are flexible and easy to change, unlike yellow page

advertisements, lawyers and law firms have a higher obligation to maintain current and accurate information on them. For example, if a lawyer or practice section leaves a firm, the website should be updated as soon as possible. The Internet Code of Conduct provides an online guide to proper behavior, adjusting the general ethical standards to provide a framework for online navigation. Moral issues are situations in which ethical conflicts arise and should be resolved.

In other words, it is a time when moral standards are not being questioned.

# Lesson Learned

### 8.1 Problems Faced During this Period

The problems that I have faced on my internship are as follows

Bootstrap: I had not much knowledge about Bootstrap Language and how it works.

Layouts Design: Did not know the proper use of the tools and faced some difficulties during Creating The Website design And layout.

Designing Drop-down: I had a minimum information about how to design Drop-down.

Form Table Design: Was unable and unfamiliar use the tools and faced few difficulties.

Synchronization with react and laravel back-end responses: Had lack of knowledge about

synchronize how to send and receive data from database using laravel to reactors. Identifying and Fixing Bugs: There were a lot of bugs Error that I encountered.

### 8.2 Solution of those Problems

Solutions of the above problems are given below

Learned about bootstrap library and its fundamentals. Learned the structure and components of react and how to use them. Layouts Design:

Understood how to use footer. And Learned homepage, front page, user settings and what to use and when. Designing Drop-down:

Supervisor taught me the use of header drop-down and how to use the it Form Table Design. I Used the class Table Hover For The Form, Learned about table border for designing tables

Synchronization with react and laravel back-end responses:

There is a JavaScript package of bootstrap that handles all kind of animation based styling.

Identifying and Fixing Bugs:

Each of the bugs are fixed by partially commenting out the codes that are believed to be working properly and keeping the codes that supposed to be the problematic.

# **Future Work & Conclusion**

The future of work describes changes in the way work will be done over the next ten years, have contributed to technological change, generation and society.

#### 9.1 Future Works

• Ensure that everything is still working and up to date: will make sure everything on the site still working properly. This means conducting a thorough audit of the site. Update Plugins or themes that need to be updated. Broken features and/or plugins.

• Perform A/B testing: After ensuring that everything is up-to-date, it should determine whether the site is as effective as it could be. A/B testing is one of the best ways to do this. In simple terms, the technique involves creating two versions of something and testing them against one another.

• Solicit feedback from the target audience: Find out what the customers likes and dislikes, as well as what features or content they value.

• Update your keywords: Keywords are a vital part of any website's strategy. The right ones helps to rank higher in search engines, which means the site will be more visible.

• Add powerful multimedia elements: Research shows that when it comes to web design, first impression matter If they find the website visually appealing, they'll tend to be more engaged.

### 9.2 Conclusion

During my internship I worked on This Website. This was the solution for contacting booking apartments/flats online. This was my first project in my internship. It is an Official Website for Kalam Real Estate Company. This Website will be more user friendly then before so that Customers can easily use it In the Website where you have to select your option and you can do the whole process just clicking the buttons and then you are done.

System will automatically run whatever process you have selected. It has been a great opportunity for me to work as a Website developer during internship at this reputed Real Estate Company Called KALAM REAL ESTATE COMPANY (KRES).

This three-month internship program was like a step stone to my carrier in the job market.

During internship I learned many important Things about IT sector. The internship program helped me a lot to gain important knowledge about how the IT sector shaping in our country. Internship at KRES taught me how to handle different client, recent website development related technologies and best used of the web development technology.

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