Automobile Alliance

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

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APPROVAL

This Project/internship titled "Automobile Alliance", submitted by Md Firoze Mehedi, ID No: 182-15-11706 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfilment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on date.

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DECLARATION

I hereby declare that, this project has been done by us under the supervision of **Shah.**Md. Tanvir Siddiquee, Assistant Professor, Department of CSE, Daffodil International University. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree.

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His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stage have made it possible to complete this project.

ABSTRACT

Online Marketplace is growing vastly & hope so it will be the biggest marketplace for the World. "Automobile Alliance" will be a different project in a view of Bangladesh and here everyone will be able to purchase their dream car from one platform. It is a hassle to explore from one store to another store only to purchase a quality product. Because it kills a huge time to bargain into different store and takes so long time into purchasing procedure.

Also on this Segment mostly we don't find any trustworthy media who would handle all our facilities or problems if happens.

Our Project "Automobile Alliance" aims to make easy a process of a Car Purchase. We believe our platform will reduce extra hassle of bargaining into door to door of Car showrooms. It will reduce length of time delay. Also we will include some after sales service so that A car owner can get every facility from one platform. Our platform will give a safe and easy service to the car lovers.

TABLE OF CONTENTS

CONTENTS	PAGE
Board of examiners	i
Declaration	ii
Acknowledgement	iii
Abstract	iv
List of Figures	viii
CHAPTER 1: INTRODUCTION	1-3
1.1 Introduction	1
1.2 Motivation	1
1.3 Objectives	1
1.4 Expected Outcome	2
1.5 Report Layout	3
CHAPTER 2: BACKGROUND	4-5
2.1 Introduction	4
2.2 Related Works	4
2.3 Comparative Studies	5
2.4 Scope of the Problem	5
2.5 Challenges	5

CHAPTER 3: REQUIREMENT SPECIFICATION	6-16
3.1 Business Process Model	6
3.2 Requirement Collection and Analysis	7-9
3.3 Business Process Modeling	10
3.4 Use Case Modeling and Description	11-13
3.5 Flow Chart	14
3.6 ER Diagram	15
3.7 Design Requirements	16
	17-18
CHAPTER 4: DESIGN SPECIFICATION	
4.1 Front-End Design	17
4.2 Back-End-Design	17
4.3 Interaction Design and UX	18
CHAPTER 5: IMPLEMENTATION AND TESTING	19-29
5.1 Registration and login	19
5.2 Buyer View	20
5.3 All User View	21-23
5.4 Seller View	24-26
5.5 Admin panel	27
5.6 Main Database View	28-29
CHAPTER 6: CONCLUSION AND FUTRUE SCOPE	30
6.1 Discussion and Conclusion	30
6.2 Scope for Future Developments	30

REFERENCES	31
APPENDIX	32
Appendix A: Project Reflection	

LIST OF FIGURES

FIGURES	PAGE NO
Figure 3.3.1: Business process model	7
Figure 3.4.1: Use case model	8
Figure 3.5.1.1: Seller flow chart	9
Figure 3.5.2.1: Buyer flow chart	10
Figure 3.5.3.1: Admin flow chart	11
Figure 3.6.1: ER Diagram	12

CHAPTER 1

INTRODUCTION

1. 1 Introduction

Car selling is a complex process that involves many different steps and can be challenging for both buyers and sellers. However, there are several easy systems that can make the process of buying and selling cars more efficient and streamlined.

One such system is an online marketplace for cars. This type of platform allows sellers to list their cars for sale and buyers to search for cars based on specific criteria, such as make, model, year, and price range. Online marketplaces also provide a variety of tools and resources for buyers and sellers, such as car history reports, financing options, and buyer protection programs.

Another easy system for car selling is the use of car buying and selling apps. These apps allow sellers to take pictures and videos of their cars, and upload them to the app. Buyers can then browse through the listings and get a good idea of the car's condition, features and pricing.

1.2 Motivation

When it is time to purchase something expensive such as Electric Vehicle, we often get confused from where to buy or how to get the most cheap rate or whom to trust. These confusions lead the purchasing procedure into a lengthy process and sometime worst experience happens with the Sellers. Obviously, it becomes a tough procedure to check out different outlets to find out best price & service providers.

We came up with a collaboration system which will hopefully prevent all the hassles for a vehicle Customer & Service provider. A service that will bring Customers & sellers under the same roof so that a buyer can connect with all the sellers to know and bargain with their products. Our aim is to provide the best possible experience to the customers

.

1.3 Objectives

- Open up a Combined Platform for Customers & Service Providers to get early response by Online Service.
- Provide all our customers the best possible experience they can expect by receiving best price & service.
- An Opportunity to collaborate all the community of Car buy & sell under one roof.
- To ensure transparency of deals & best service one should get.

1.4 Expected outcome

- 1. Car seller will easily get their targeted customers
- 2. Lengthy time will be reduced
- 3. Payment issues will be fixed properly by using Bangladeshi payment Gateway SSLCOMMERZE.
- 4. Customers will get their required vehicles very easily.
- 5. Customers can easily bargain with the sellers.

1.5 Report Layout

Chapter 1: Introduction

We have tried to talk about describe our project shortly, inspiration behind the Project & also how this project could be good for us. It serves to provide background information and context, and to give an overview of what is to come.

Chapter 2: Background

To run a project it is necessary to know about the background or history if the project. We will be able to know about all the projects, applications or websites regarding car business.

We have also talked about related tasks which have been done before & running now.

Chapter 3: Requirement Specification

Requirement collection and specification refers to the process of gathering, documenting, and analyzing the needs and expectations of stakeholders for a software system, product, or project. This process is critical to the success of the project, as it helps to ensure that the final product meets the needs of the users and stakeholders. We have discussed here about the Business Model & Analysis by using Use Case Model.

Chapter 4: Design Specification

Design is mandatory because it plays a critical role in how products, services, and systems are created and experienced. It helps to shape the overall user experience and ensure that products are functional, efficient, and appealing. In today's digital age, design has a significant impact on the user's first impression and perception of a company, product or service. This section also describes the infrastructure of the Front End & Back End design of our project.

Chapter 5: Testing the full website

This Chapter introduces us how to go through this website & buy or sell a product by bidding online. Basically this is a full go through process on our website.

Chapter 6: Conclusion and Future Scope

On this Section we have discussed through the projects future scopes & details.

CHAPTER 2

BACKGROUND

2.1 INTRODUCTION

To know the details of a project we need to analysis the background of our work area. The project must be studied all the cases so that we can find other projects which are similar. We must also analysis the other competitive projects cases & features. This Background analysis part is a very important part, cause it helps us to find the report of limitations, advantages – disadvantages, future scopes & also other previous projects. By finding all these background information we will be able to create or modify our project newly so that it can be a beneficiary for all the consumers of this service. Also it will help us to fix previous issues what was in the previously existence project. Due to those motives the historical past of a assignment performs a crucial function in an internet improvement assignment indeed.

2.2 RELATED WORKS

In Bangladesh similar project haven't been done yet. There are some preowned car selling platforms which are well known. They are given below:

- 1. Bikroy.com [1]
- 2. GariImport.com [2]

Problems:

- 1. No Recondition Car Sellers Available
- 2. No safe transection system for Customer & Seller
- 3. No Digital Payment Available.
- 4. Time Consuming to buy a Car.

But actually, there is no other platform for car buyers where they will be able to buy a new car while bargaining with different sellers. Digital method of making payment is also linked here. We have used the Bangladeshi payment method by SSLCOMMERZE.

2.3 COMPARATIVE STUDIES

We have tried to do something different of which our features will be different from others what is needed for a customer & sellers.

We have tried to decorate our project with some advanced features along with regular features which will help a customer to find their dream car easily. Some features have mentioned below

- o Customers can post for any cars they needed
- o Showroom owners can see their targeted customers.
- o Buyer and seller can chat with each other.
- o Buyer will be able to check their order progress from their profile.

2.4 SCOPE OF PROBLEMS

Due to project analysis we have succeeded to come with some new solutions of previous issues & problems. To run on a market it is obvious to know about the markets value & challenges. We will & trying to resolve all the short comings as early as possible.

2.5 Challenges

The most important challenges & issues we have faced during our project work ar given below:

- A collaborated smart responsive website
- User friendly Website for all the consumers
- Managing three types of users at the same time on this website
- Including Bangladeshi Payment System for the Local Marketplace.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Processing Model

3.1.1 Seller

A seller is a person or business that offers goods or services for sale. They may sell products through physical storefronts or online platforms, and may also be referred to as vendors or merchants. On this platform seller will be selling automobile vehicles. On this section Seller will have the access on homepage, available customer requirements & will be able to bid the new car biding, after bidding process if any customer agrees to buy, then they can go forward.

3.1.2 Buyer

A buyer is a person or organization that purchases goods or services. They may purchase products for personal use or for resale, and may also be referred to as a customer or client. In business, a buyer typically works in procurement or purchasing and is responsible for selecting vendors, negotiating contracts, and making purchases on behalf of their organization. Buyer will have a different portal where they can see the webpage and post for a car by listing the requirements. If any seller bid & comment that they can provide the related requirement fulfilled car, then buyer can choose the car seller if they want and buy from the showroom. The order will be confirmed by making payment to the admin panel.

3.1.3 Admin

An administrator, or admin, is a person responsible for the maintenance, configuration, and reliable operation of computer systems, networks, and servers. The role of an administrator can vary depending on the organization and the specific systems they are responsible for, but some common responsibilities include

- 1 Managing user accounts and permissions: creating, modifying, and deleting user accounts, and setting appropriate access rights to ensure the security of the system.
- 2 Monitoring system performance: using tools and utilities to monitor the performance of systems and applications, and identifying and troubleshooting any issues that arise.
- 3 Managing backups and disaster recovery: creating and maintaining backup copies of important data, and planning and implementing disaster recovery procedures to ensure the availability of the system in case of a failure.
- 4 Installing and upgrading software: installing and configuring new software and applications, and upgrading existing software to ensure that the system is up to date and secure.
- 5 Managing network devices: configuring and maintaining routers, switches, and other network devices to ensure that the network is functioning properly and is secure.
- Admin will have to use their personal credential to access the Admin Panel. An Admin have the ability to manage or edit anything, Admin will also get the access to to edit dashboard, percentage of seller & Car specs details.

3.2 Requirement Collection and Analysis

Requirement Collection is a crucial piece of a challenge. Analysis and collection of the requirement is the process of gathering and documenting the specific needs and expectations of stakeholders for a project. It involves identifying the problem or opportunity that the project aims to address, and determining what the project should accomplish in order to meet those needs. This process helps to ensure that the project is aligned with the overall goals and objectives of the organization, and that it addresses the specific needs of the stakeholders who will be impacted by the project.

During the requirement collection phase, stakeholders are typically interviewed or surveyed in order to gather information about their needs and expectations. This information is then analyzed to identify patterns and common themes, and to prioritize which requirements are most important to the success of the project.

The requirement analysis phase involves taking the information gathered during requirement collection and making sense of it in order to clarify the functional & non-functional system requirements. Requirement collection is the initial stage of the process, where stakeholders are identified and their needs are gathered through various techniques such as interviews, surveys, and workshops. This information is then analyzed to identify common themes and patterns, and to prioritize the requirements based on their importance and urgency.

Functional requirements describe what the system need to do and non-functional requirements describe how the system should behave. The requirements are then verified and validated to make sure they meet the stakeholders needs.

The outcome of requirement collection and analysis is a clear, comprehensive, and well-defined set of project requirements that guide the development and implementation of the project.

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a. Business Process Modeling

The project "Automobile Alliance" is a multifunctioning project. We have tried to run this commerce on a significant adventure process. By this business model we will try to show the full overview of this project. It's an perceptive depiction of a adventure. In this process, we create a work cycle of a frame. Giving all craft and make an reasonable & simple overview.

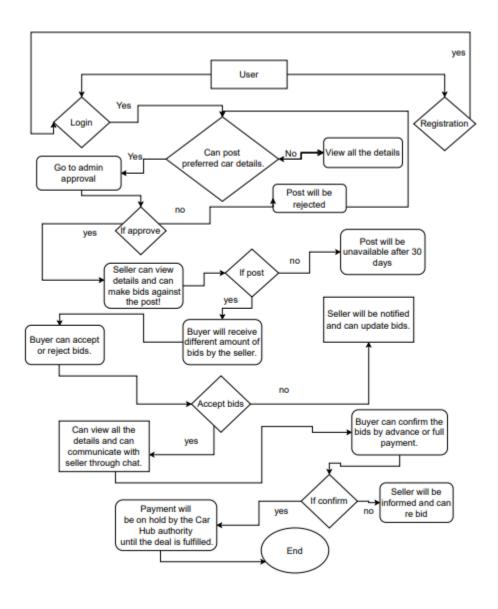


Figure 3.3.1: Business process mode

b. Use Case Modeling and Description

Case modeling is a technique that can be used to improve the efficiency and effectiveness of business processes by providing a clear and accurate representation of how work is currently being done, and identifying opportunities for improvement.

We would love to make a layout which uses defense. On this modern era we are eager to ease all the process at its best. Before case modeling we have previewed our company system, Consumer Criteria & location. We posted using protective version systems. Identifying the special kinds of possession used within side the shape and hint their circles returned into our work.

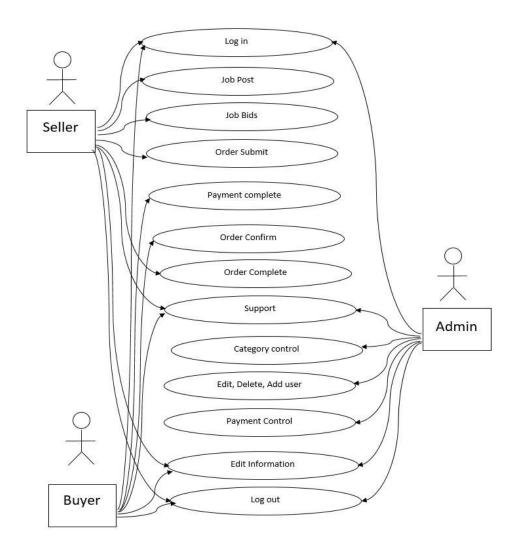


Figure 3.4.1: Use case model

3.5 Flow Chart

Flowchart is a significant of structure diagram that shows the process of workflow. This will help to build the diagram of users, website & the system.

It typically consists of a series of boxes or shapes, connected by arrows that show the sequence of steps in the process. The boxes or shapes can represent different types of actions or decisions, such as starting or ending a process, performing a task, making a decision, or branching to a different part of the process. Flowcharts are commonly used in business, engineering, and programming to document, analyze, and communicate processes. They can also be used to plan, design, and troubleshoot systems, and to train employees on processes.

3.5.1 Seller flow chart

This flow chart will make an overview for a sellers portal so that we can easily know the journey of a sellers throughout our website or project. It is mandatory for a seller to register & login to go through this proces

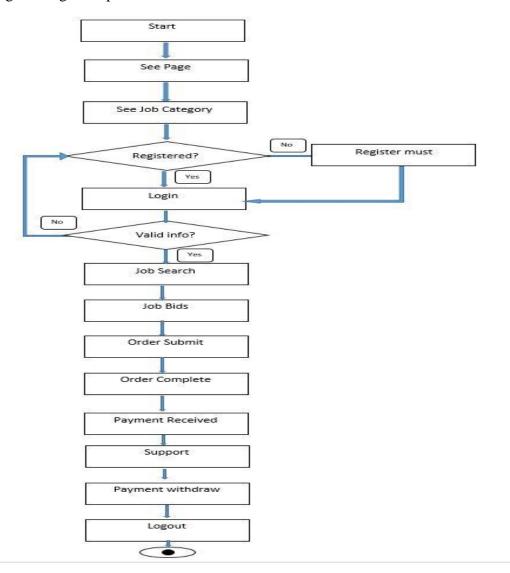


Figure 3.5.1.1: Seller flowchart

3.5.2 Buyer flowchart

This Flowchart is consisted with the buyers feature. It is mandatory for a buyer to register first & login after to get into the process.

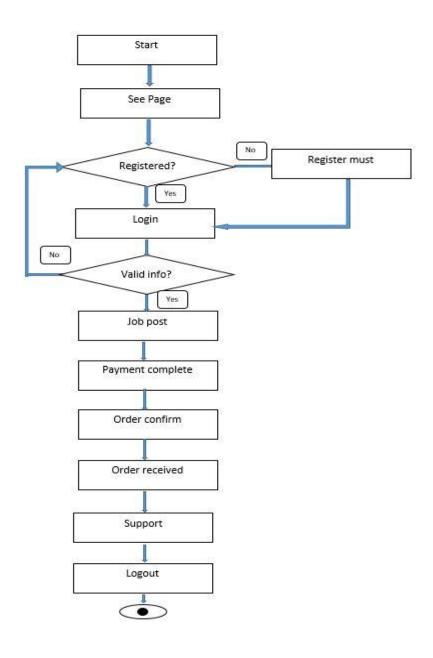


Figure 3.5.2.1: Buyer flowchart

3.5.3 Admin flow chart

This Flowchart is consisted with the admins feature. It is mandatory for an admin to register first & login after to get into the process. Admin will be able to access admin panel through database.

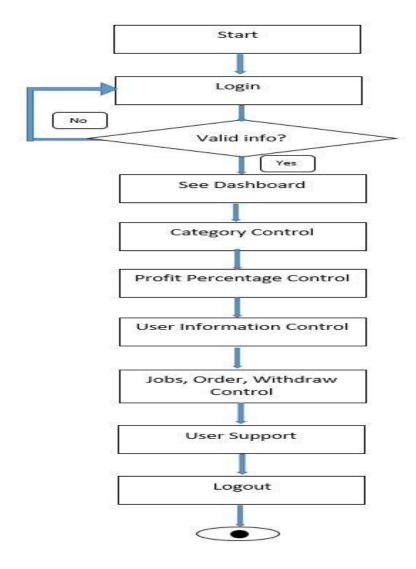


Figure 3.5.3.1: Admin flow chart

3.6 ER Diagram

An entity-relationship (ER) diagram is a type of diagram to represent the structure of a database. It is used to model the data and the relationships between different data entities. To Start a project it is a must task to create an ER diagram & it is a must do work.

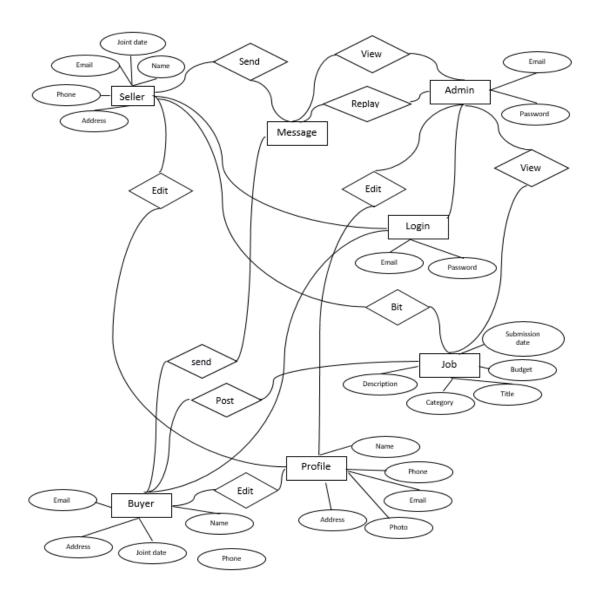


Figure 3.6.1: ER Diagram

3.7 Design Requirements:

- 3.7.1 Website will be consisting of 3 different user. Those are Regular visitor, Automobile Showroom owner as Seller & Purchasing buyer.
- 3.7.2 Seller accounts will be the showroom owners who will be offer for a car from buyer and sell the product it customer meets all the requirements.
- 3.7.3 Buyer will be any car lover who wants to purchase a brand new car with the best price in less time. Buyer can post for a car by listing their requirements and wait for the bids.
- 3.7.4 After confirming a deal buyer will pay the full amount to the admin panel of the website, Afterward the payment will be converted into showroom owners account through the process.

CHAPTER 4

Design Specification

4.1: Front-End Design

By using html, CSS, Bootstrap & Javascript we have designed the front end structure of our project.

4.2: Back-End Design:

We have used MySQL to manage our database frequently.

PHP was the main basic of our Back End development & the framework was "Laravel".

4.3: Interaction Design and UX

Authentication:

- Each & every user will have to login via Email & Password
- Before Login each user will have to go through a process by giving their personal details such as Name, Contact no., Photo ID & Password.
- User must be identified by the user email address authority by a verification code.

Feed:

- Everyone will be able to see available cars & car purchasing posts.
- Customer can make a deal with their preferred seller.

Buyer Profile:

- Customer can select their Photo Id.
- Required Car listings will be shown.
- Car purchasing bidding will be trackable.
- Enough Car Listings
- Data will be editable.
- Car showrooms details who bided the car post
- Logging out

Seller Profile:

- Customer can select their Photo Id.
- Required Car listings will be shown.
- Previously sales details
- Car dealing status.
- Available car listings section
- Payment withdrawal Option.
- Conversation list.
- Configuring Information
- Customers Basic data
- Logging Out

Post:

- Posted Car name
- Required Specifications & Car model as mandatory
- Car Purchasing Budget.

Payment:

• Paying system Requirement.

Chapter – 5 IMPLEMENTATION AND TESTING

A visitor is a person who accesses the website by entering the URL or clicking on a link. A visitor can also be referred to as a user or a web visitor. The term visitor is often used in web analytics to refer to the number of people who have accessed a website or a specific web page. A website visitor can interact with the website in different ways, such as browsing the content, filling out forms, making a purchase, or leaving comments. Some website visitor's data can be tracked by using cookies, which allow website owners to keep track of their visitors' behavior and preferences, and to understand how they interact with the website.

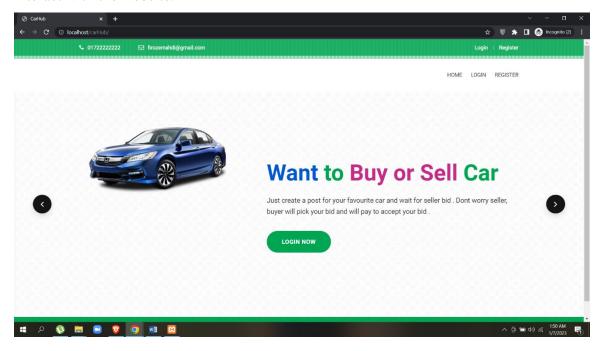


Figure 5.1.1: Home Page Interface

Car Purchasing Customers & Car selling showroom owner can only be registered on this site.

By Selecting Register from the top of home page, one will have to register themselves

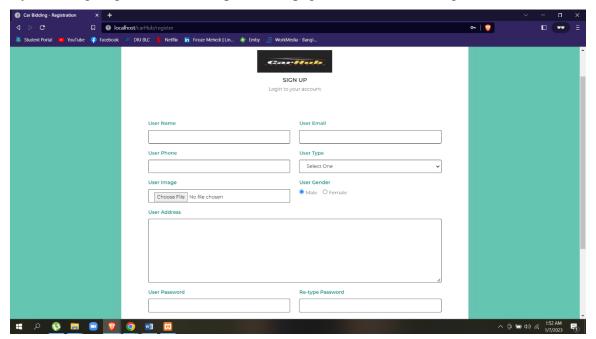


Figure 5.1. 2: Registration Form

Any user can only use login option after completing registration process.

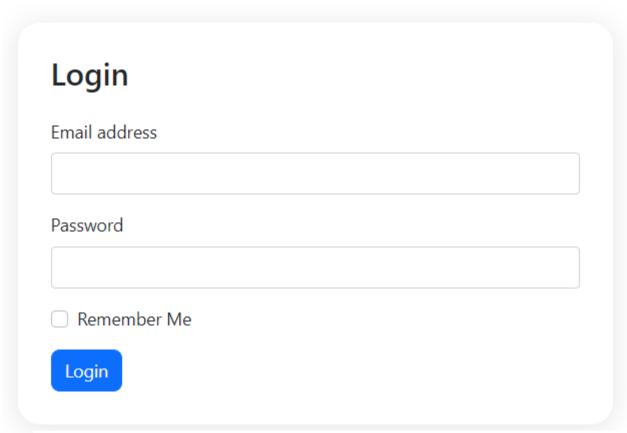
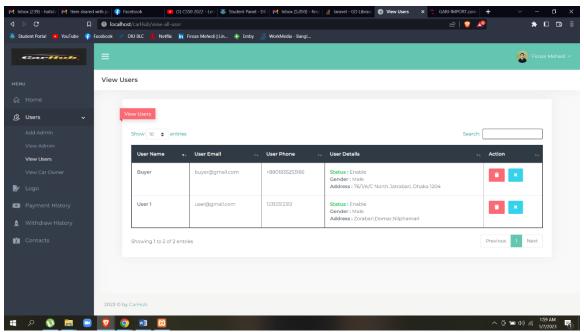


Figure 5.1. 3: Login Form

Customer View:



Customer will see their profile & they can manage their basic information.

* D G E localhost/carHub/adminre | 👽 🥂 Show 10 \$ entries Name: Seller Email: Seller@gmail.co Phone: 01925908653 Address: Munshiganj 03 January 2023 Payment History Address : 76/1/A/C North Jatrabari, Dhaka 1204 Contacts BDT 2250000 Name: Buyer Email: buyer@gmail.com Phone: +8801835253166 03 January 2023 BDT 250000 Email: Seller@gmail.co Phone: 01925908653 Address: Address: 76/1/A/C North Jatrabari, Dhaka 1204 Munshiganj Name: User 1
Email: user@gmail.com
Phone: 12312312312
Address:
Zorabari,Domar,Nilphamari Name: owner-1 Email: owner@gmail.com Phone: 01724698392 Address: Zorabari,Domar,Nilphama BDT 2880 03 January 2023 BDT 320 BDT 2880 02 January 2023 BDT 320 # P 🚯 🔚 🙂 🦁 👩 💹 🔀 へ 章 智 (4) // 2:00

Figure 5.1. 4: Buyer Profile View

Figure 5.1. 5: Profile Edit Option for Buyer

Customer will change Password from "Change Password" Option.

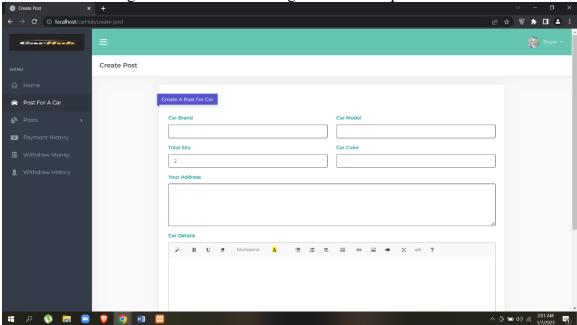


Figure 5.1. 6: Password Change Form

Figure 5.1. 7: Order Status Check and Download Submitted Task

Customer can see his/her posting details from my list option.

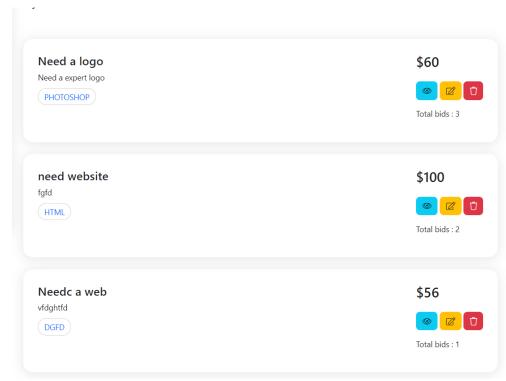
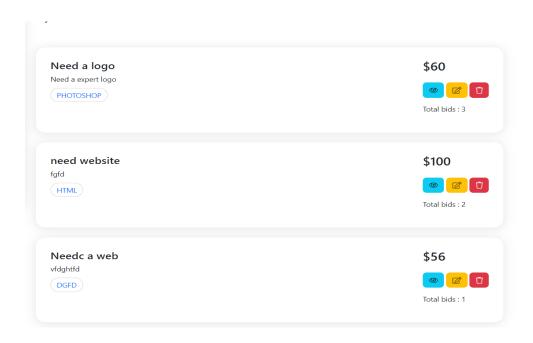


Figure 5.1. 8: Posted Jobs List by Buyer



Will have to pay the payment during confirming the car from showroom or buyer.

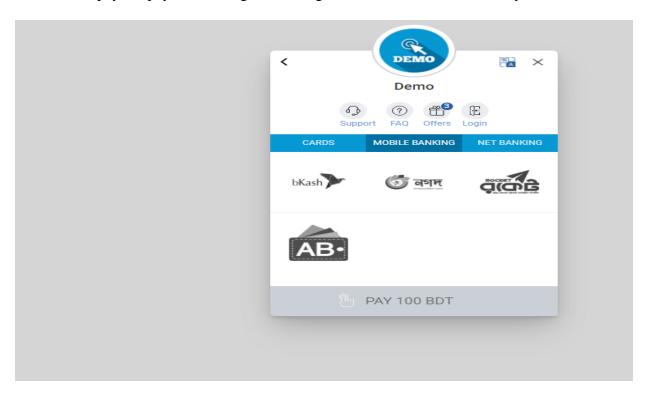


Figure 5.1.10: Automatic Payment Method

Payment Confirmation will pop up just like this.

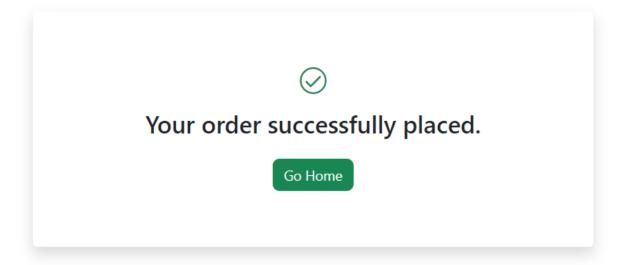


Figure 5.1.11: View after order confirmation

Main Databse View

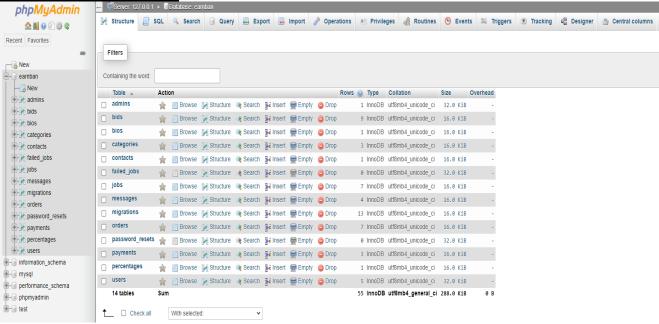


Figure 5.1. 27: Main Database View

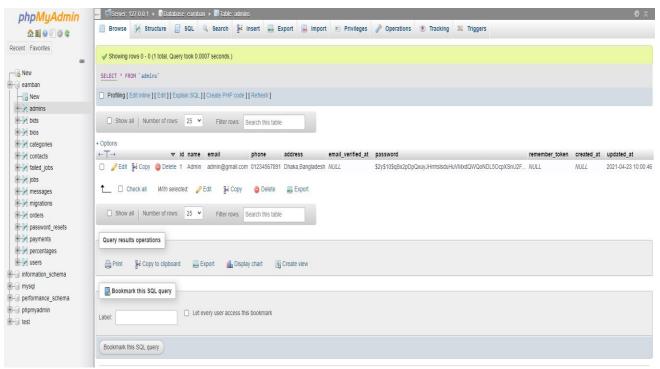


Figure 5.1.28: User List in Database

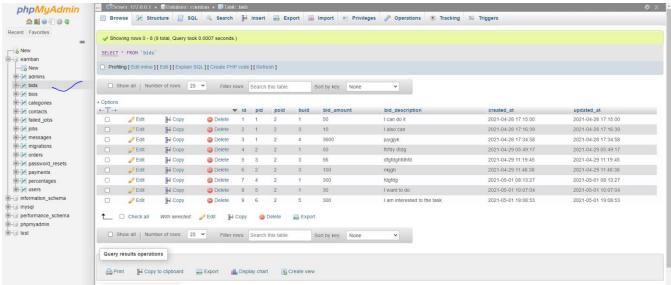


Figure 5.1.29: Bids List in DB

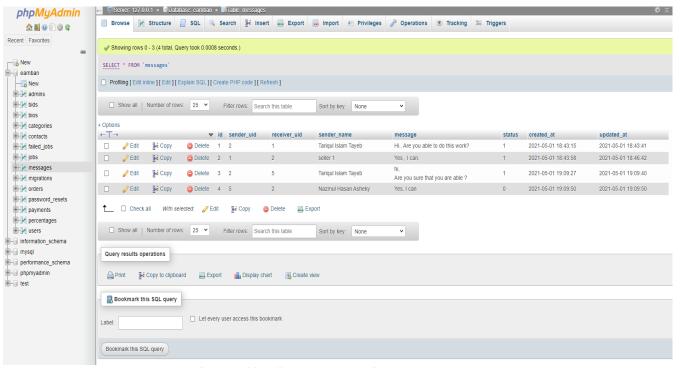


Figure 5.1.30: All Users Messages List

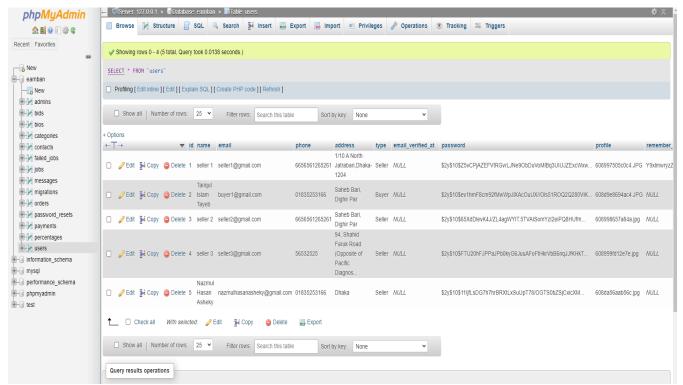


Figure 5.1. 11: Users List in DB

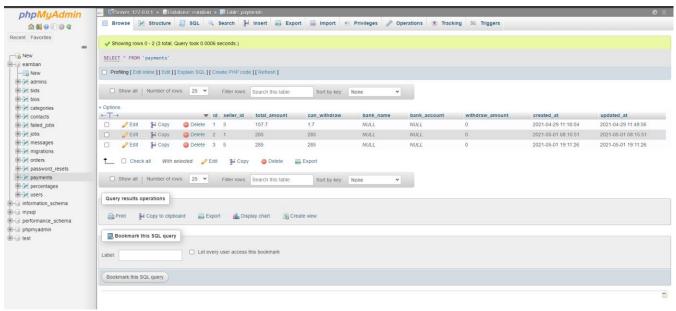


Figure 5.1. 32: Payment Details in DB

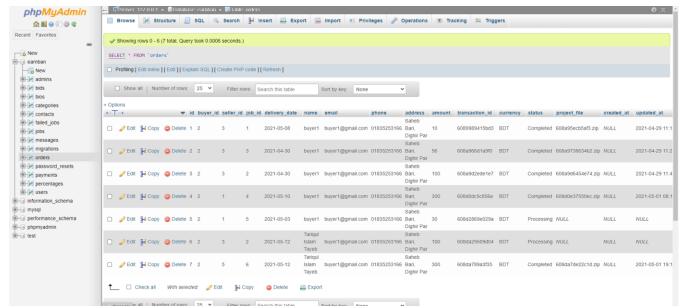


Figure 5.1.33: Order Details in DB

These are the visual representation of our project basis website

CHAPTER 6

CONCLUSION & FUTURE SCOPE

6.1 Discussion and Conclusion

"Automobile Alliance" will be an amazing project in Bangladesh for all the car lovers and also the sellers. It will help the customers to find out their preferred car very easily without hassle & consuming any extra time. Also everyone will get the access to have online transaction by any Mastercard, VisaCard & Mobile banking which means all types of Bangladeshi payment system will be available with the help of SSLECommerze

6.2 Scope for Further Developments

Undertaking benefits never ends. Our project is aimed to do more updates in our website. In Sha Allah we will add some more features which is mentioned below:

- Car Displaying will be in 3d mode.
- Payment issues would be more easier and Car loan feature will also be added
- Auction Sheets will be directly connected with our platform.
- We will have also the service to repair a car afterwards

Reference:

- [1] https://bikroy.com/en
- [2] https://gari-import.com.bd/
- [3] https://bhalogari.com/
- [4] https://www.ebay.com/
- [5]https://www.autoauctionmall.com/

APPENDIX

Appendix A: Project Reflection

My Journey with this project starter more than a year ago. For better accuracy I have tried to explore car showrooms, Car owners experiences & also Showrom owners problems about different complaints. I have tend to gather variety of information that will lead my project flawlessly. I have researched why anyone should use my platform to purchase or sell their product. With all those ideas & information I have tried to figure out peoples need & worked followed by. My main focus is to be the mediator between Car Purchasing Customer & Automobile showroom owners so that each side can make a deal easily with the best price. I believe this platform will give us an amazing feedback by which everyone can trust a platform to buy a car. In Sha Allah we will be updating our project precisely to go afterward.