E-Garage: An Android Based Application

BY

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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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DAFFODIL INTERNATIONAL UNIVERSITY

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APPROVAL

This Project titled "E-Garage", submitted by Hasanur Rashid Bhuyain, ID No:191-15-12797, Md Mazharul Haque, ID No:191-15-12318, Sumon Shikder, ID No:191-15-12737 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 28 January 2023.

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of Raja Tariqul Hasan Tusher, Assistant Professor, Department of CSE Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

"E-Garage" is a mobile application where users can register and spend time with maintain their car in the garage. Customers can book their schedule in advance and also buy garage product by giving User-friendly, simple, fast and cost-effective vehicle problem details. Mobile apps deal with customers who need to troubleshoot their media, but they don't have enough time to wait in the garage or workshop. Traditionally it is done manually. The main function of this system is to send requests for reservation services, ordered product from other shop, management requirements and user details, technician details. These details are needed when the system significantly manipulates input containing user details and the system displays as output on the screen. The main page of the system is displayed as a dashboard from where the user can be entered with email and password or can register with the requested information. It can be accessed by Seller and Customer. Only Seller can add data to the database. Here data can be recovered easily. The data is well protected for personal use and makes data processing very fast.

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CHAPTER 1

Introduction

1.1 Introduction

E-Garage is an e-commerce Android application. E-commerce always transactions conducted over the Internet. Every time individuals businesses use e-commerce buy or sell products and services online. In our country there are 2 types of transaction. Frist one is Busses to Business (B2B) and other one is Business to Customer (B2C). In this android app we use the Business to Customer (B2C). E-commerce is often used to refer to the sale of physical goods online product, but it can also describe any kind of business transaction supported by the Internet. In our application there are two types of user. One is buyer and other is seller. Where the seller can sell garage product by creating a profile for their own garage in this app. The user can also login as a customer and can buy product. This app will make business model easier and save your time. Everyone also can easily use it application with all types of smartphones and internet access devices can be used.

1.2 Motivation

The main goal of this project is to save time and manage the collection in the shop and workshop. In a well-known workshop or garage, technicians have to maintain and repair a large number of There is a car during the day so customers have to wait a long time and sometimes they had to leave without repairing or servicing their vehicle. In the other side the seller also sell product from the shop on online like Mobil, gear oil etc. Those people who want to buy any car accessories in a famous shop from rural place they can get it easily from courier service.

1.3 Objective:

The goal are clear here, an e-garage app for people who love to buy product at home and those who want to do garage and car service business online and in a physical store. It's great platform for sellers and buyers. Sellers can quickly sell their products and buyer can easily buy their products. Both seller and buyer can save their precious time by using this platform.

The projects' goals are given as follows:

- Fully asynchronous of e-garage platforms.
- Improving Business Relations for both buyer and seller.
- Cost and time-effective Management.
- User can add products to carts.
- Users can read all descriptions of the product and services from this app.
- Improve service efficiency in a workshop.

1.4 Expected Outcomes

There are so many benefit of this app for both buyer and seller.

- Buyer can easily search all the garage products by filter options.
- Buyer can check the app as well as contact number and also contact with the company that they want.
- Admin can set all permission, security as well as safety for both customer and seller.
- The seller can able to update all the products and car service up to date.
- Seller and customer both can contact to each other by providing contact number.

• The seller can make advertisement on their account and shop as well as workshop.

1.5 Project Management and Finance

This application is free of cost project, because we made by using our own experience as well as idea and knowledge. But, in future when we want become popular, then we make a policy to get commission from the shop and also workshop. In that time we also makes our app for paid.

1.6 Report Layout

In this report there are six chapters and which chapter talks about that is mentioned below.

Chapter 1

Description of the project motivation, objectives, projected outcomes and Project Management in this part.

Chapter 2:

Here we try to discuss about background and also related works.

Chapter 3:

Here we try to discuss about all requirement and specification about this application.

Chapter 4:

Here we try to discuss about all the design of the application and font-end as well as back-end.

Chapter 5

Here we try to discuss about the impact of the society.

Finally, chapter 6

Concludes the report with the outcomes and future work of this project.

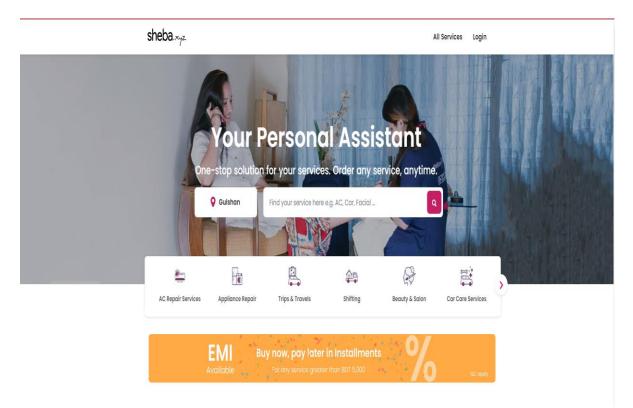
CHAPTER 2

BACKGROUND STUDIES

2.1 Preliminaries/Terminologies

This is an e-commerce application. And we build it from our experience, ideas. This egarage helps those people who are really very busy with their daily lives for their job or any cause. In their working hours, they can use it at their workplace. By using this application people can find the nearest garage for servicing. Therefore, this project helps customers or user by helping them find products, make servicing, identify contact numbers and locations.

2.2 Related Works



This is website base e-garage system. Here people get other services too.

Figure 2.1: Seba xyz interface[9]

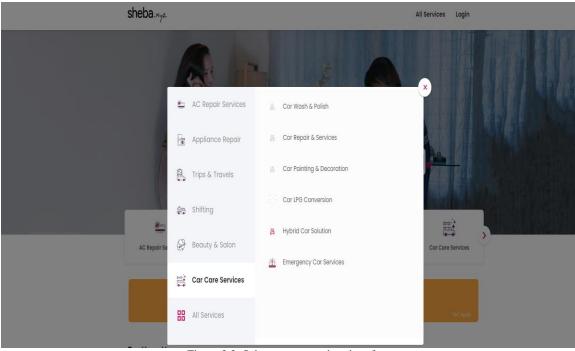


Figure 2.2: Seba xyz car services interface

Here only get car services

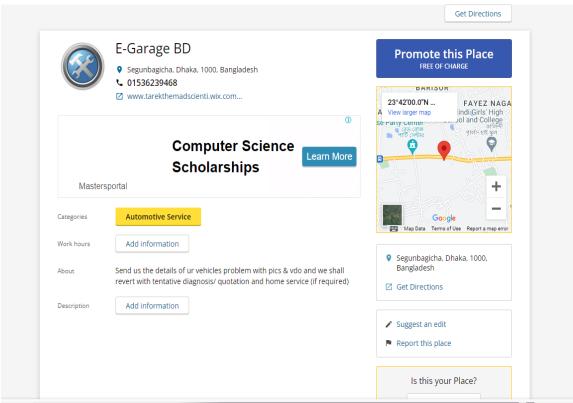


Figure 2.3: Interface of e-garage BD[10]

There lots of e garage page abaleabol in facebook. E-garage Bangladesh is one of them.

eGarage Bangladesh	
Posts About Photos Videos	
Intro	Pinned post
 Page - Vehicle repair shop 345, Tejgaon, Dhaka, Bangladesh, Dhaka, Bangladesh 09638-999666 support@mavenautos.com Open now ~ Roadside collection ~ Price range - £££ Rating - 5.0 (20 reviews) (1) 	eGarage Bangladesh 17 July 2022 • @ Vour post-vacation blues just got better, because now you can get A Free Car Wash' with our general servicing package! Our general servicing package includes: See more DRIVE SMOOTH,
Photos See All Photos	
Connect with eGarage Bangladesh on Facebook	
Log in	or Create new account

Figure 2.4: Facebook page of e-garage Bangladesh [11]

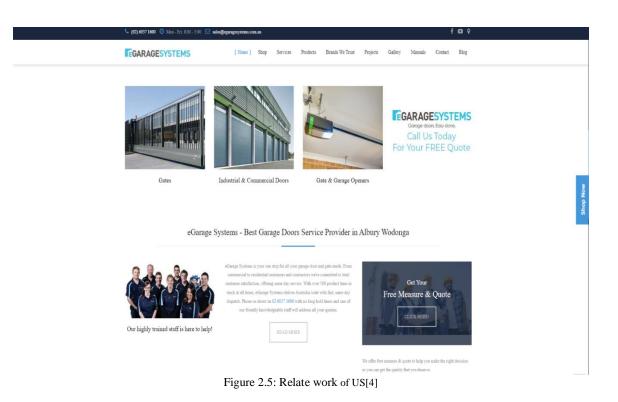




Figure 2.6: Relate work of Spain[12]

2.3 Working elements:

For code selection or code writing and code implementation time, we used native Java Code and my app will be better and unique than others. With the help of my app, we will collaborate with local businesses to keep the locality undisturbed. This app will authorize suppliers and servicer. So that they cannot deliver the wrong product. All products will be verified by the admin, which will help prevent irrelevant ads. Therefore, this payment system will be secure.

These are all codes Languages already used here:

- Native java coding
- Xml design
- Firebase Database,

Native Java:

The native keyword in Java is applied to a method to indicate that the method is implemented in native code using JNI (Java Native Interface). The root keyword is a modifier that applies only to methods and we cannot apply it anywhere else. Methods implemented in C, C++ are called native methods or foreign methods [1].

Xml design:

XML (Extensible Markup Language) is a markup language similar to HTML, but without the use of predefined tags. Instead, you define your own tags designed specifically for your needs. It's a powerful way to store data in a format that can be stored, searched, and shared. More importantly, because the underlying format of XML is standardized, whether you share or transmit XML between systems or platforms, locally or over the Internet, the data can be parsed by the recipient Standardized XML syntax [2].

Firebase:

Most apps need to know the user's identity. Knowing the user's identity allows apps to securely store user data in the cloud and provide the same personalized experience on all of the user's devices. Firebase Authentication provides a backend service, easy-to-use SDKs, and pre-built UI libraries for authenticating users to your app. We support authentication with passwords, phone numbers, and popular federated identity providers such as Google, Facebook, and Twitter. Firebase Authentication is tightly integrated with other Firebase services and leverages industry standards such as OAuth 2.0 and OpenID Connect to facilitate integration with custom back-ends [3].

Relate work [4]

2.4 Literature review:

Cao et. al. has described in his paper that in short, asynchronous communication is than a simple event service. Offers high availability features through warranty asynchronous processing, storage and forwarding, and delivery to business continuity applications

operate with uninterrupted service. It enables a robust service-based architecture thanks to geographical transparency and administrative control. Above all, because it is built on server-side component models, extremely easy to [5].

Hadzilacos et. al their study The course was generally a success. Students learned how to use the Internet to research competitors and articles, how to conduct online surveys and plan online events, copyright, and personal data security during the course. Transactions online as well as how to create their own e-commerce website. They know the methods and steps to take when transacting on the Internet [6].

Wan et. al. has stated in their work that the System was built with LAMP development environment and follow the three-layer B/S design. Design B/S make the entire system is more layered and structured, facilitating expansion and maintenance in future. The server runs on an efficient Apache server, the database is MySQL and The Web Socket protocol can be used to communicate with clients and servers in a timely manner and efficient. The whole architecture is well organized and the code is concise. After extensive testing, the system mostly meets the user's requirements, but still some problems need to be solved, such as getting strong concurrency at a later stage, etc [7].

Niu et. al. described in their study that in this study we exhibit double heterogeneity graphic attention network to transfer product research expertise to an e-commerce store research. DHGAT is a complete, end-to-end system that uses graphics to improve both ID and text representation. It uses hierarchical attention structure to create homogeneous and diverse neighbors at the same time. Semantic distance between users Requests and store names can be linked using the article title neighbor content from Search product. In addition, the proposed loss of neighbor distance adds a lot of value to understand the topological structure of graphs. DHGAT also takes into account the user characteristics to better define user intent and personalized store search returns result. We do large-scale offline reviews and online A/B testing. The results show that logic [8].

2.5 Scope of the Problem:

This is the E-garage application prototype. In that time there is no online payment system in this application. Because there necessary to create an online payment gateway Permissions and big money from SSL. But in the future I will update the payment system. In future we think this app well be very helpful for busy people.

Some kind of access is required.

- Must needed internet connection.
- Must be sign up in the website.
- For the second time there need login.
- Must need a verified email foe login and signup.
- Must need given all the information in the signup section.
- Must need input phone number.
- Must need payment for join as a seller.

2.6 Challenges:

- Real and original information.
- Must be use reliable person for product delivery system.
- Set the product picture are makes some problem in few cases.
- Update information regularly.
- User friendly & good servicing accuracy.
- Time management.
- Database management.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Business Process Model describe the method of the project. In our project, most of the services illustrate, The Business Process Model is given below.



Figure 3.1: Business Process Model

3.2 E-Garage

Here are e-garage form terms under the categories listed below: B2B (Business to Business) refers to the exchange of goods and services between businesses, companies and organizations. About 80% of e-commerce today follows this model. B2C (Business to Consumer) companies operate by using the internet to produce or distribute goods and services directly to consumers. Technically, they are consumers in a different business model.

3.3 Requirement Collection and Analysis

This is an important step in collecting requirements and integrating them into the analysis. We will now look at some of the criteria for creating this application, outlined below.

Software Requirements

- Operating System: Android 9-12.
- System Design: Adobe Photoshop, Creatly.
- Language: Native Java.
- Framework: XML.
- Editor: Android Studio.
- Device: Mobile.
- Database: Firebase

Hardware Requirements

- Processor: Octacore.
- RAM: 4GB
- Mobile

Functional Requirements

A complete overview of our system should include extended some functionality requirement, must be complete registration and login sections, verify account in verification sections, approvals sections approve the account, maintenance and updates sections are change every day. From personal profiles we can know every details of the person.

Non-functional Requirements

In this section we needs make it easy for you to help or help Perform benchmarks, rearrange memory and get smooth operation as fast as possible, then load our software. We must confirmed that the application is developed with a user-friendly, easy understandable interface.

3.4 Working principal:

Here we can see the process of using our application.

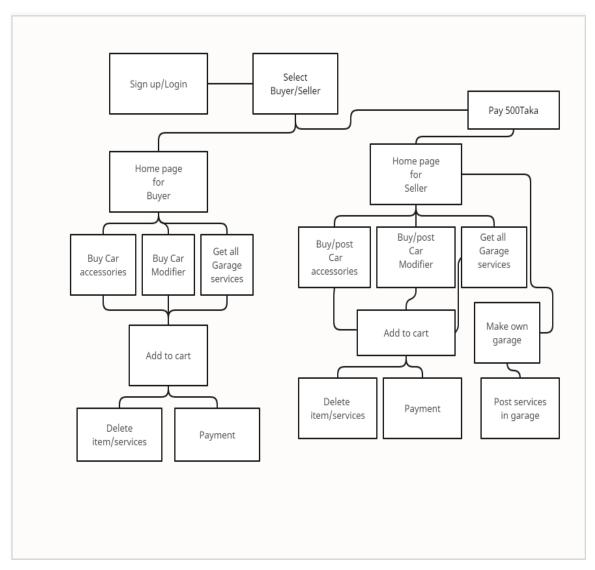


Figure 3.2: Working Model

3.5 Use Case Modeling and Description

After completing all the design and analysis requirements, we need to set up the tests and coding, because testing is very important for any development project and coding is also very important. First we need to set up the main design and model design, then we need to write the implementation code and configure the coding and finally test it. The use case model we used in our project is given below.

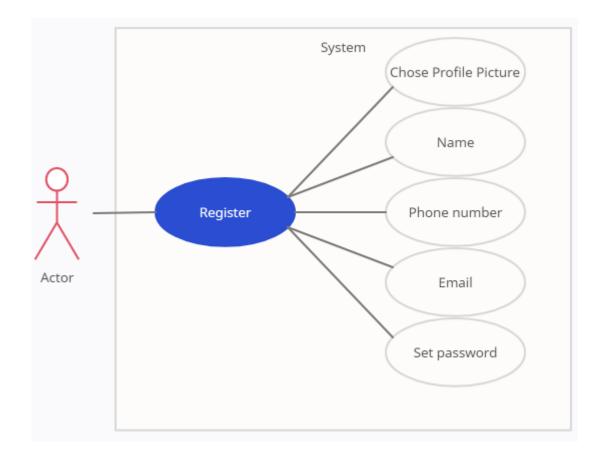


Figure 3.3: Use case diagram of Registration

Use Cases Details

Use Case Name: Create an account (For Register)

Actor: User

Primary Path:

- Chose Profile Picture
- Enter Full Name
- Put down contract Number
- Set Email Address
- Chose Password
- Click "Sign Up"; button

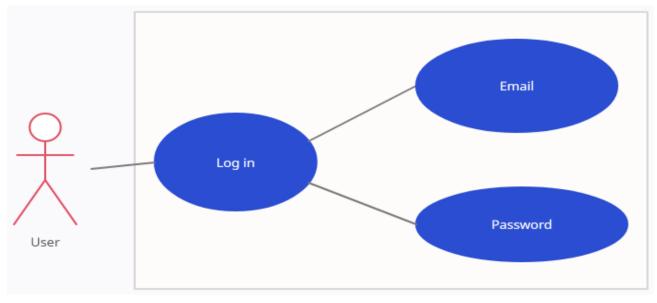


Figure 3.4: Use case diagram of log in

Use Case Details

Use Case Name: Login

Precondition: Registered

Actor: User Primary Path:

• Enter verified Email Address

- Enter the set Password
- Click "Login" button



Figure: 3.5 Use Case Diagram for Seller

Use Case Details

Use Case Name: Seller

Precondition: Must registered with 500 taka

Actor: Seller

Primary Path:

- Register as a seller
- Enter Login
- Search product
- Post product
- Buy product
- Sell product
- Make own garage
- Make many services on own garage
- Delete services and products
- Edit or Create Product and details
- Create News
- Makes Offer
- Manage Product and services list
- Manage Order
- Manage Product limitation

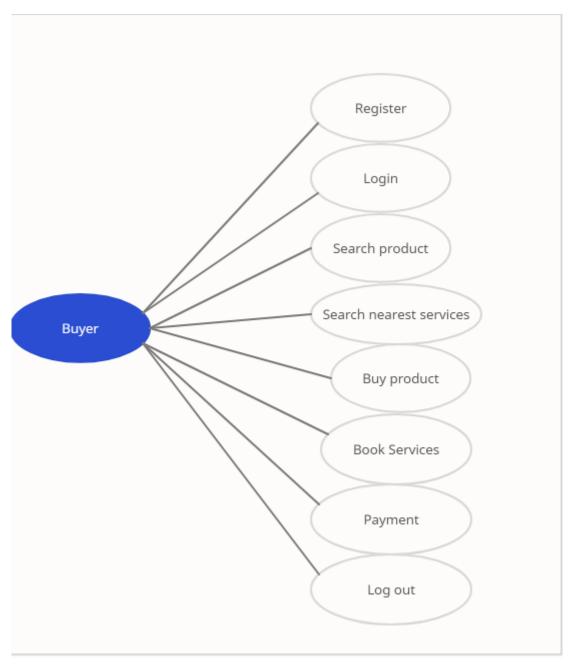


Figure: 3.6 Use Case Diagram for buyer

Use Case Details

Use Case Name: Customer or Buyer Precondition: Must have registered free of cost Actor: Customer /Buyer Primary Path:

- Register for 1st time
- Login
- Search product
- Search Garage
- Buy product
- Book car services
- Can add to cart
- Detect Item from the cart
- Access All offer
- Access main page
- Can make order
- Click "Sign Out" button

3.6 Design Requirement

Core Features for buyer:

- Home
- Main Menu
- Recent Product
- Nearest garage service
- All products
- Get service
- Brand Shops
- Profile

- Cart functionalities
- Search Products
- See product details
- Delete product
- Contact with the company

Core Features for seller:

- Upload Product
- Upload services
- Manage product
- Manage order
- Manage car garage services
- Transfer order depending on location
- Product list
- Car services list
- Search option of all list of product
- Filter option for find services
- Payment Confirmations
- Add product
- Delete product

Chapter 4 DESIGN SPECIFICATION

4.1 Font-End Design

Splash Screen: We design a welcome page

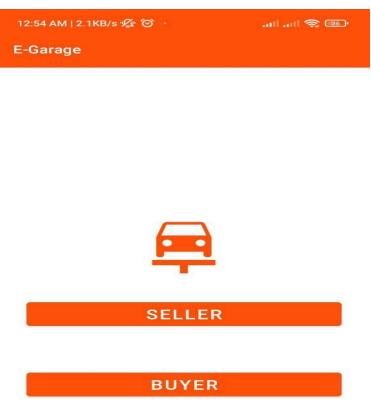
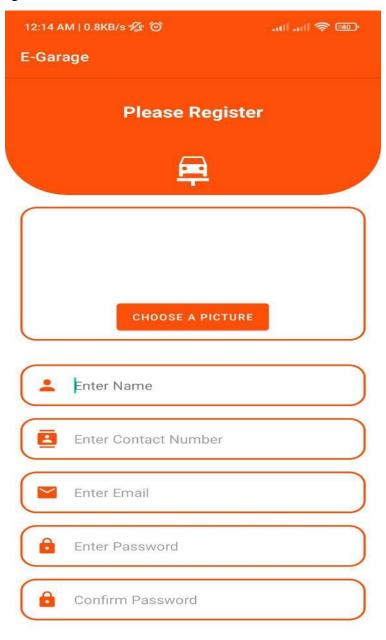


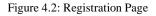
Figure 4.1: Front-end

Here User can chose any option. If a user is a Customer then he/she chose buyer otherwise he/she can chose seller for sell his/her product.

Sign Up Page:

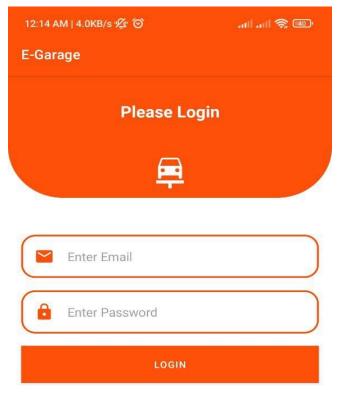
Firebase base create account need to enter in this application. Here some needed information are (1) Chose a photo (2) Enter the name (3) Enter the contact Number (4) Email address (5) Password, (6) Confirm password then user should Click on "Sign Up" button for enter the application as a buyer. If the user makes as seller, then enter as a seller Then user get a verified account.





Login Page

After the successful sign up, we will auto enter the application. For next time entering we don't need to log in because the system recognize this account until logout, for login must need to Email and password and click the "Login" button.



New here? Please register an account.

Figure 4.3: login Page

Home page:

Both seller and buyer has same home page for this application



Welcome! to E-Garrage

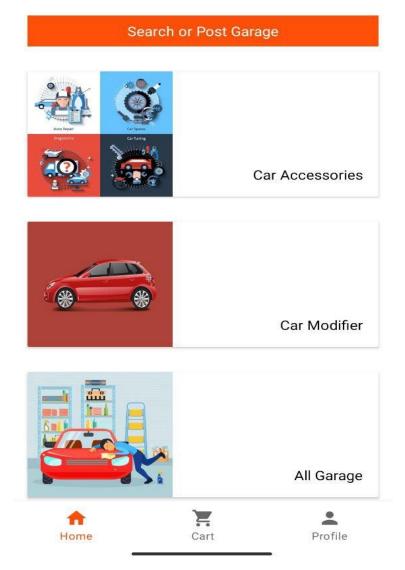


Figure 4.4: Product and garage

Profile section

Both types of user can see their personal profile with profile picture





tanmoy

12365475

LOG OUT



Figure 4.5: Profilr

Seller Entry

If any user register any account as a seller in this application. That case he/she must be pay bdt 500 taka otherwise

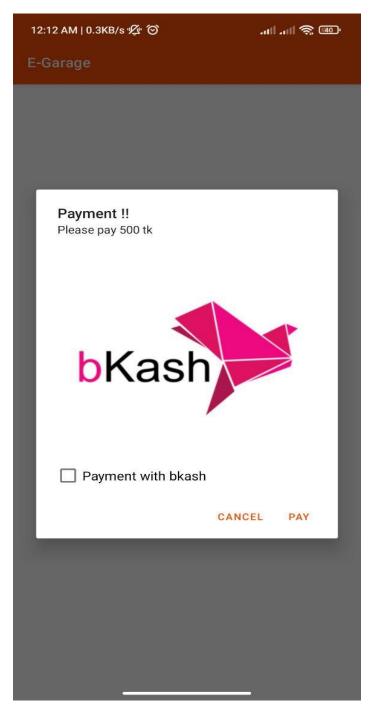


Figure 4.6: Payment

Car accessories and modified

Here two types of transition occurs. The user who join this application as a buyer he/she can buy or add product on this option. Last one who join as a seller he/she can buy the product as well as post for sell the product

12:10 AM 0.0KB/s	all all 📚 💷	12:11 AM 0.5KB/s ½ 🌀	all all 📚 💷
Accessories	(E)	Modified Vehicles	÷
Accessorie	es	Modified Vel	nicles
Car Styling	g Seat Neck Pillow 2300 ADD Details		rose 20 ADD Details
	stearing wheel 6000 ADD Details	TOTAL NOT	colour changes 3000 ADD Details

Figure 4.7: Product

Garage section:

This section only for buyer because here buyer can get services from those garage. If anyone want to join his section as a garage owner, he/she must me need to create a own garage for post.

12:11 AM 0.5KB/s 🖌	⊉©	all 🧙 💷	2:05 AM 7.6KB/s 💯 🎯 🎧	मा। मा। 📚 💷
E-Garage			E-Garage	
	Alu Garage Dhaka Cant		wheel repair 1000	
			backlight changes 800	
	Ali garage Best garage in the town.		engine oil changes 200	

Figure 4.8: Garage services

Search or post garage

In this section the buyer can search the nearest garage for servicing and the seller can make a won garage for posting new service.

12:13 AM 0.1KB/s 💯 🎯	all 🧟 🗐	1:56 AM 29.5KB/s 🜿 🎯 🕐	all all 🔶 🕮	
E-Garage		E-Garage		
Post or Search	ı	Post or Search		
Division	•	Division	-	
District	V	District	Barishal	
SEARCH		SE	Chattogram	
			Dhaka	
			Khulna	
		1	Mymensingh	
			Rajshahi	
			Rangpur	
			Sylhet	

Figure 4.9: Filter of garage



Figure 4.10: Set garage aria

Post garage

There seller need a garage picture then enter the garage name next give some discretion finally select the division and district for make a garage profile. For add services need to enter the services name and price of the services.

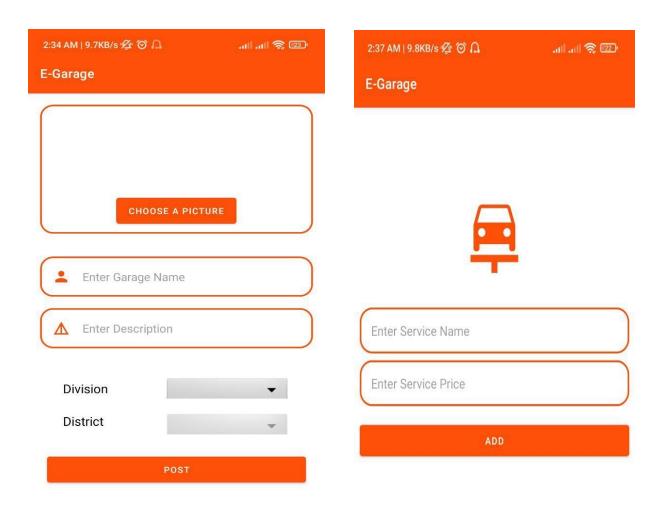


Figure 3.11: Make own garage

My items or card

Here user can delete item or services from card.

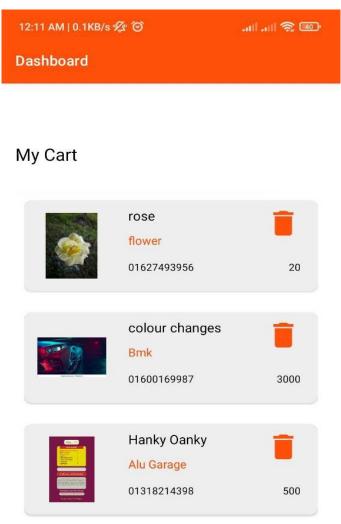




Figure 3.12: User cart

Figure 4.10: My items

Post for sell product

Here seller can make post foe their own product.

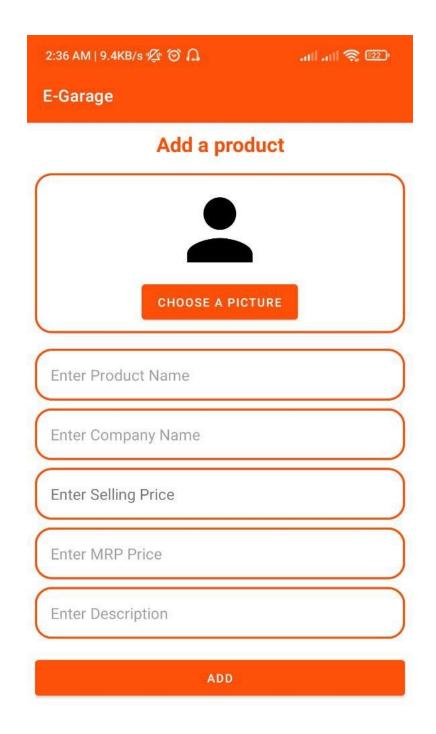


Figure 4.13: Post new product

4.2 Back-End

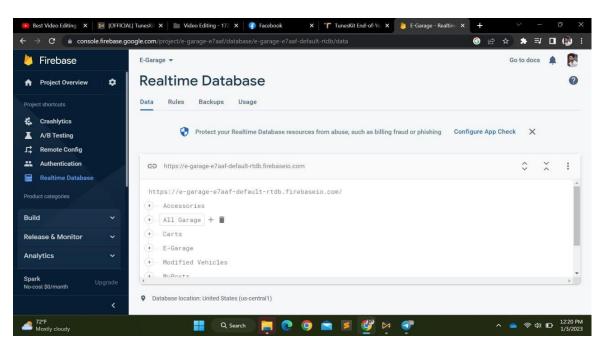


Figure 3.14: Real time database

Firebase	E-Garage 🔻				Go to do	cs 🌲 🕅
Project Overview 🔅	Authentication					0
oject shortcuts	Users Sign-in method Ter	nplates Usage	Settings			
Crashlytics						
A/B Testing	Q Search by email address	s, phone number, or	user UID		Add user	с :
Remote Config	Identifier	Providers	Created 🤟	Signed In	User UID	
Authentication Realtime Database	asusvivobook12737@gmai	M	Jan 3, 2023	Jan 3, 2023	yijdyJy7w7QzE3aahhreK0Upqh92	
duct categories	tagbjccf@gmail.com	>	Jan 3, 2023	Jan 3, 2023	eGyoTwLzn9fjA0CnJ80w6zoqLYP2	
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ark Upgrade cost \$0/month	mdmazharulhaque689@g		Jan 2, 2023	Jan 2, 2023	fDpvwZCxteUrzAc0kWznqOnrInZ2	
	mazharul15-12318@diu.ed	>	Jan 2, 2023	Jan 2, 2023	dXS311z0ERdPiTcX4GVhHubv84t1	



Chapter 5

Impact on Society, Environment and Sustainability

5.1 Impact on Society

The advantage of this app of e-commerce for the company is that it will be easily accessible at 24 hour and in a 7 days. If a person wants to buy products from an online store, he will have to pay low operating costs. Such as, if our product or service is low, the shipping fee will be completely canceled by submitting an objection to the admin with proof. Our future vision will launch this app worldwide, then we will provide coupons and offers and it has to be smooth, which is a great thing for the customer. E-Garage has become an increasing reality as like as e-commerce. Singapore is a small country with inexhaustible natural resources, understands the value of the new economy and wants to position itself as an information and knowledge hub in Asia. By using this application people can save their precious time and by providing reviews they can choose the best and worst products. If anyone has face problems and careers, they can easily contact the admin and as well as the company.

Society will benefit from:

- Time saving working
- Shopping throw application authentication
- Buy good products with best dill with the company
- Easy to get all the product and services

5.2 Impact on Environmentally

Now a day in our country most people are getting updated. This is why the number of ebusinesses has been steadily increasing since the Internet became accessible to everyone. In other countries, e-commerce and online product are witnessing remarkable growth as the benefits of the Internet, higher education, lifestyle changes and economic growth of a country increase are used more and more. Therefore, they are based on technology. For this reason, they have a huge private transport that uses their personal labor. It is an environmental disaster for our country due to wasted fuel and traffic jams. But online product receiving can help them shop from home.

5.3 Ethical Aspects

Ethics is linked with cultural connotations and social forces to provide its philosophical underpinning Justice, the right use of power and authority and good relationships. Global decisions and precision, consequences and context are all of great ethical importance for the development of a sustainable society.

5.4 Sustainability Plan

Sustainability in this application we are updating our brand. In the future, we will develop sustainable perching case. We will try to reduce servicing and product cost and use good quality paper bags for packaging the product and will also play a recycling role. This site we will try to reduce energy waste. It is the policy of this application that the seller and customer will authorize, for this reason, the products will support sustainability. Consider an e-commerce marketplace where we always try to resell used items.

Chapter 6

Conclusion

6.1 Discussion and Conclusion

We are try to building a very efficient and simple application for ordinary people. Because in my country perspective there are lots of people are not well user of technology. We play this system actual operation for customer, seller and administrators. E-commerce is one of the most famous businesses worldwide. We try to flow the role of e-commerce platform for making our application E-Garage. Day by day, people are using online platforms to purchase their needed products. By using this platform, both customers and sellers benefit as both can save their time. Sellers or entrepreneurs can expand their business using this platform. It was a great trip for us. We learned a lot things while working on this project.

6.2 Future Work

In future, we will try to expand the e-garage application. Adding new option and offer in this application make this current system improve and its effectiveness,

System efficiency including:

- In future we will continue to improve this application.
- Try to promote our apps outside Bangladesh
- Try to add some new features
- Improve the quality of this application
- Makes a unique and effective UI design
- Try to fix previous problem
- Improve database and payment gateway
- Try to hot line number

Reference

- [1] "Native keyword in Java," *GeeksforGeeks*, 28-Jul-2022. [Online]. Available: https://www.geeksforgeeks.org/native-keyword-java/. [Accessed: 03-Jan-2023].
- [2] "XML Introduction XML: Extensible markup language: MDN," XML: Extensible Markup Language / MDN. [Online]. Available: https://developer.mozilla.org/en-US/docs/Web/XML/XML_introduction. [Accessed: 03-Jan-2023].
- [3]"Firebase authentication," Google. [Online]. Available: https://firebase.google.com/docs/auth#:~:text=Firebase%20Authentication%20provides%20backend %20services,Facebook%20and%20Twitter%2C%20and%20more. [Accessed: 27-Dec-2022].
- [4] "Garage doors parts and accessories for sale," *eGarage Systems*. [Online]. Available: https://shop.egaragesystems.com.au/. [Accessed: 03-Jan-2023].
- [5] "Wei Qi Cao, Juan Zi Li, Ke Hong Wang, and Tao Zeng, "Asynchronous communication for complicated e-commerce applications," *Third International Conference on Quality Software*, 2003. *Proceedings.*, 2003.
- [6] "An e-learning course on e-commerce personales.upv.es." [Online]. Available:http://personales.upv.es/thinkmind/dl/conferences/elml/elml_2011/elml_2011_1_30_5004 7.pdf. [Accessed: 17-Jan-2023].
- [7] "F. Wan, X. He, Y. Zhang, and Y. Kou, "Design and implementation of webpage instant messaging system of e-commerce platform of characteristic agricultural products," *Proceedings of the 2018 International Conference on Transportation & Logistics, Information & Communication, Smart City* (*TLICSC 2018*), 2018."
- [8] "X. Niu, B. Li, C. Li, R. Xiao, H. Sun, H. Deng, and Z. Chen, "A dual heterogeneous graph attention network to improve long-tail performance for shop search in e-commerce," *Proceedings of the 26th* ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, 2020. "
- [9] "Get expert professional services at home in Bangladesh," Get Expert Professional Services at Home in Bangladesh / Sheba.xyz. [Online]. Available: https://www.sheba.xyz/. [Accessed: 26-Jan-2023].
- [10] "Yellow.Place, "E-garage BD Dhaka, Bangladesh," Yellow.Place. [Online]. Available: https://yellow.place/en/e-garage-bd-dhaka-bangladesh. [Accessed: 26-Jan-2023]."

- [11] "Log in or sign up to view," *Facebook*. [Online]. Available: https://www.facebook.com/egarage.maven/. [Accessed: 26-Jan-2023].
- [12] "My Egarage," My Website. [Online]. Available: https://myegarage.com/. [Accessed: 26-Jan-2023].

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