VIRTUAL VISITING CARD

\mathbf{BY}

ISRATH RAHAMAN ID: 191-15-1018

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

Supervised By

Amit Chakraborty Chhoton

Assistant Professor Department of CSE Daffodil International University

Co-Supervised By

Naznin Sultana

Associate Professor Department of CSE Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH JANUARY 2024

APPROVAL

This Project titled "Virtual Visiting Card", submitted by Israth Rahaman, ID: 191-15-1018 to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment 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 25/01/2024.

Supervised by:

Amit Chakraborty Chhoton

Assistant Professor Department of CSE

Daffodil International University

Co-Supervised by:

Naznin Sultana

Associate Professor

Department of CSE

Daffodil International University

Submitted by:

Israth Rahaman

ID: 191-15-1018

Department of CSE

Israth Rahaman

Daffodil International University

DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Amit Chakraborty Chhoton, 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.

BOARD OF EXAMINERS

Dr. Md. Fokhray Hossain (MFH)

Hassain

Chairman

Professor

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Md. Sadekur Rahman (SR)

Assistant Professor

Department of Computer Science and Engineering Faculty of Science & Information Technology

Daffodil International University

Internal Examiner

Dewan Mamun Raza (DMR)

Senior Lecturer

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Dr. S. M. Hasan Mahmud (SMH)

Assistant Professor

Department of Computer Science

American International University-Bangladesh

Internal Examiner

External Examiner

ACKNOWLEDGEMENT

First we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project/internship successfully.

We really grateful and wish our profound our indebtedness to **Amit Chakraborty Chhoton**, **Assistant Professor**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of "Web Development" to carry out this project. His endless patience ,scholarly guidance ,continual encouragement , constant and energetic supervision, constructive criticism , valuable advice ,reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to Professor Dr. Sheak Rashed Haider Noori, Head, Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

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

ABSTRACT

This web-based project "Virtual visiting card" describes about the creation of an inventive way to transform the conventional exchange of contact or personal details into a virtual visiting card. In order to promote effective and dynamic networking interactions, this project envisions a user-friendly platform where people can create, manage, and share their details and chose their desire template or card. The Virtual Visiting Card Web Application provides a seamless and environmentally beneficial substitute for traditional paper-based cards, thereby mitigating their limitations. With ease, users may create personalized digital cards with interactive features, professional information, and all the necessary contact details. The program puts security, accessibility, and user experience first in order to offer a dependable and effective networking platform. This virtual card contains necessary information of a person such as personal details, online platforms details and as a person required. To make this project, I have used many technologies these are for frontend I have used HTML5, CSS, JavaScript, and for the backend jQuery, and for database I have used MySQL. [2] [8]

TABLE OF CONTENTS

CONTENTS	PAGE
Board of examiners	i
Declaration	ii
Acknowledgements	iii
Abstract	iv
CHAPTER	
CHAPTER 1: INTRODUCTION	1-3
1.1 Introduction	1
1.2 Motivation	1
1.3 Objectives	1
1.4 Expected Outcomes	2
1.5 Project Management and Finance	2
1.6 Report Layout	2-3
CHAPTER 2: BACKGROUND	4-5
2.1 Preliminaries/Terminologies	4
2.2 Related Works	4
2.3 Comparative Evaluation	4
2.4 Scope of the Problem	4-5
2.5 Challenges	5
CHAPTER 3: REQUIREMENT AND SPECIFICATION	6-8

3.1 Modeling Business Processes				
3.2 Requirements Gathering and Evaluation	7			
3.3 Model applications and Description	8			
3.4 Specification for Design	8			
CHAPTER 4: DESCRIPTION OF THE SYSTEM	9-23			
4.1 Front-end Design	9-17			
4.2 Back-end Design	18-22			
4.3 Interaction Design and User Experience (UX)	23			
4.4 Implementation Requirements	23			
CHAPTER 5: IMPLEMENTATION AND TESTING	24-29			
5.1 Database Implementation	28			
5.2 Testing Implementation	29			
5.3 Test Results and Reports	29			
CHAPTER 6: DISCUSSION AND ANALYSIS	30			
6.1 Effects on the Society	30			
6.2 Impact on Environment	30			
6.3 Ethical Aspects	30			
CHAPTER 7: CONCLUSION	31			
7.1 Discussion and Conclusion	31			
7.2 Scope for Further Developments				
REFERENCES	32			

LIST OF FIGURES

FIGURES	PAGE NO
Figure 3.1.1 The complete website and the business process model of NFC	6
Figure 3.3.1 Use-case diagram	8
Figure 4.1.1 Customer Profile	9
Figure 4.1.2 Home page 1	10
Figure 4.1.3 Home page 2	10
Figure 4.1.4 Home page 3	11
Figure 4.1.5 Home page 4	12
Figure 4.1.6 Home page 5	12
Figure 4.1.7 Home page 6	13
Figure 4.1.8 Footer of Home page	13
Figure 4.1.9 About Us page	14
Figure 4.1.10 About Us page (About smart card)	14
Figure 4.1.11 About Us page (About smart card feature)	15
Figure 4.1.12 Contact Us page	15
Figure 4.1.13 Cart details page	16
Figure 4.1.14 Product details page	16
Figure 4.1.15 Card details form page	17
Figure 4.1.16 Shipping Address form details page	17
Figure 4.2.1 Card database details	18
Figure 4.2.2 Contact information database details	18
Figure 4.2.3 Order database details	19
Figure 4.2.4 Order-item database details	19
Figure 4.2.5 All customer database details	20
Figure 4.2.6 Shipment Address database details	20
Figure 4.2.7 All types of social media link database details	21
Figure 4.2.8 All types of user-information database details	21

Figure 4.2.9 All user-information database details	22
Figure 4.2.10 All contact information database details	22
Figure 4.3.1 UI design	23
Figure 5.1.1 Card database details	24
Figure 5.1.2 Contact information database details	25
Figure 5.1.3 Order database details	25
Figure 5.1.4 Order-item database details	26
Figure 5.1.5 All customer database details	26
Figure 5.1.6 Shipment Address database details	27
Figure 5.1.7 All types of social media link database details	27
Figure 5.1.8 All types of user-information database details	28

LIST OF TABLES

TABLES	PAGE NO
Table 5.2.1 Testing Implementation	28-29

CHAPTER 1 INTRODUCTION

1.1 Introduction

"Virtual Visiting Card" is an online tool. I offer the idea to exchange of contact Information which is essential in both professional and personal interactions in the modern digital age, where networking and connectivity transcend geographic boundaries. While traditional paper visiting cards were once a networking staple, they are at a crossroads in an era marked by sustainability and digitization. A game-changing solution that has the potential to completely redefine how people present their contact details through the card. Now a day's most of mobile phone has an amazing technology called NFC. When a virtual visiting card take near to the mobile phone through scanning the card on that phone user can see the all information of that card. And this process scanning works by the help of NFC (Near Field Communication).

1.2 Motivation

The virtual visiting card is being brought right into the 21st century by the virtual visiting card. Utilizing NFC innovation, the "Virtual Visiting Card" can share all of your data when tapped against a cell phone. Put all of the information right where people spend the majority of their time - on their phone, so you don't have to mess with old paper business cards!

1.3 Objective

This virtual visiting card is a web-based system with a very user-friendly interface which indeed will make the whole management process easy to manage and operate with zero redundancies. By using this website customer can make their order for personal card with their personal information, professional information, their social accounts information and as their preferences which kind of information they want.

1.4 Expected Outcomes

Contribution to modern networking techniques: In modern business networking,

the virtual visiting card gains acceptance and preference as useful tool.

Digital business card: Sharing their contact details, address, websites & emails

easily.

Profile hub: Sharing everything about who you are and what you do. Share links to

10⁺ social profile channels for streamlined social connectivity.

Link to any URL: Linking and digital presence. Such as Apps, videos, E-menus and

PDFs. Share business presentations, sing-up forms, product demonstrations, and

more.

1.5 Project Management and Finance

In my website I have used several kind of payment methods. These are, for the payment

consumers can pay via credit cards, visa or master card or also can pay via bKash, Nagad,

rocket or cash on delivery which methods they feel comfort.

1.6 Report Layout

Chapter 1: Introduction

This chapter covers a number of topics, including the introduction, the reasons behind my

website development, its goals, the anticipated results of my project, project

management, and money.

Chapter 2: Background

This chapter includes my discussion of the project's preliminary issues, terminology,

connected works, comparative analysis, and the range of potential future problems and

challenges.

Chapter 3: Specifying Requirements

I covered business process models, use case modeling and description, requirement

collection and analysis (including diagrams), and design requirements in this chapter.

Chapter 4: Description of the system

I've talked about front-end, back-end, UI, and UX design in this chapter.

Chapter 5: Evaluation and Application

I have covered database implementation testing, test results, report details, and implementation testing (with a table) in this chapter.

Chapter 6: Analysis

This chapter covers the impacts on society, the environment, ethical issues, the assessment procedure for my project, and the benefits and drawbacks of economics and the environment.

Chapter 7: Conclusion

In this chapter, I have discussed about conclusion (a basic summary of this project), Scope for Further Developments.

BACKGROUND

2.1 Preliminaries/ Terminologies

I chose Laravel because its robust capabilities and open source coding tools that quicken the development of online applications, making it superior to competing web frameworks. To make this project I have used for frontend HTML5, CSS, JavaScript and for the backend I have used Laravel. [1] [4]

2.2 Related Work

This Virtual Visiting Card is an e-commerce platform. With the help of my website, people can make their smart cards according to their requirements information. In this project report, we can explore how the virtual visiting card web application was developed. With help of some existing website I took some basic knowledge for design:

- Introcardbd.com [9]
- Mobilecard.com [10]

2.3 Comparative Evaluation

The online application is made in a way that even someone without any computer skills may easily use it. It is not necessary to be a technological expert to use this internet program because it is easy to use.

2.4 Scope of the Problem

Traditional paper business cards are static representations of professional identity and cannot adapt to changes in contact information or professional updates. Smart Business Card web application addresses this problem by providing users with a dynamic platform for creating and managing digital cards that can be updated in real time.

Current digital business card platforms sometimes only allow users to enter basic text information due to a lack of capabilities that enable users to fully express their ©Daffodil International University

professional identities. User can generate multimedia-enriched digital cards with links, videos, and photographs using the Smart Visiting Card Web Application, which improves expressiveness.

2.5 Challenges

creating a reliable scanning and QR code generation system to facilitate error-free and smooth information sharing. Incorporating user analytics tools to monitor interactions with digital cards and give users actionable information. Make sure that people can easily access with every device smoothly. Now a day's latest version mobile phone contains advanced features, from that NFC one of them but old version mobile phone does not have these feature (NFC). For this reason, I need QR code generation system for the old version mobile phones.

REQUIREMENT SPECIFICATION

3.1 Modeling Business Processes

A diagram used in business process modeling describes about the whole process of this website and NFC. Such as how does the user panel work and so on. [7]

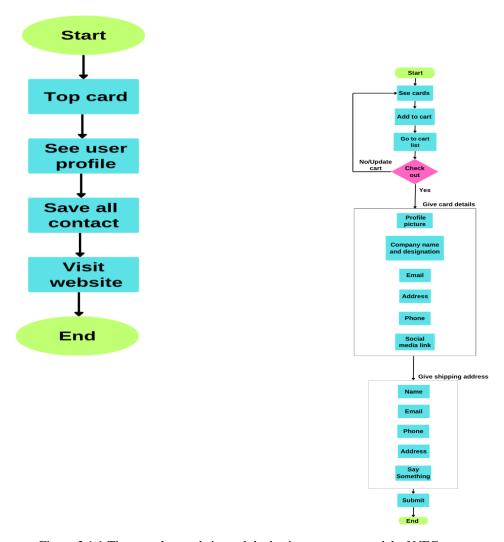


Figure 3.1.1 The complete website and the business process model of NFC

3.2 Requirements Gathering and Evaluation

The basis for the development and accomplishment of the Smart Visiting Card Website is created by the comprehensive collection and evaluation of requirements, which include user needs, and technological factors, for business. goals, and moral concerns. The analysis's conclusions will help the development team build an effective, innovative, and user-friendly platform that satisfies a wide range of user needs and complies with all applicable laws and ethical guidelines. Users should be able to safely create accounts, and user data confidentiality and privacy should be guaranteed via the authentication procedure. Users should be able to scan QR codes to share contact information, and the website should make it easier to generate QR codes for each digital card. In order to adjust to different screen sizes and devices, such as PCs, tablets, and smartphones, the website should be responsive.

Target Users:

- Professionals from various industries.
- Business owners and entrepreneurs.
- Job seekers and networkers.
- Anyone looking to replace traditional paper visiting cards with a digital solution.

3.3 Model applications and Description [7]

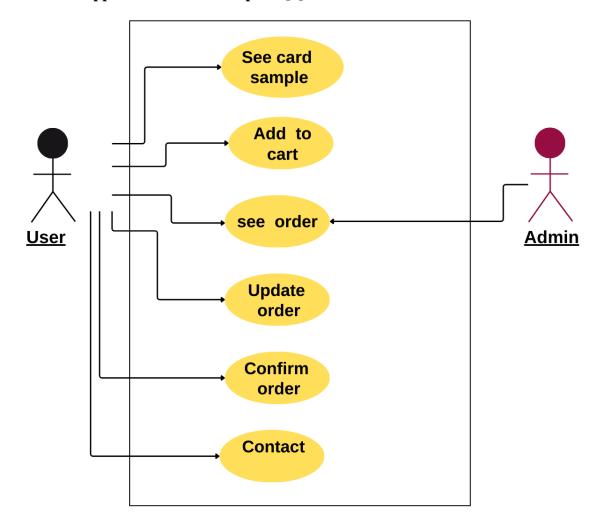


Figure 3.3.1 Model applications diagram

3.4 Specification for Design

According to my project design specifications is an important part. In my website I have concentrated on the design aspect of my website to make it easy to use and manage, understand and attractive. I also provide some feature by which user can easily use:

- User can visit the whole website without register or login.
- User can update their information after took access his/her card.
- Opposite person can easily get user's information via tapped card closed to the phone and save user all information.
- If any user has any queries they can contact us through mail. ©Daffodil International University

DESCRIPTION OF THE SYSTEM

4.1 Front-end Design

A system's UI is represented through frontend design. Regarding the front-end layout of my website I have used HTML5, CSS, JavaScript and make my website visible to the users [5] [6].

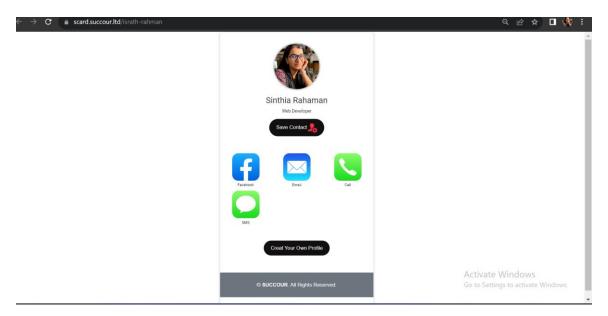


Figure 4.1.1 Customer details

Figure 4.1.1 shows existing customer profile details.



Figure 4.1.2 Home 1

Figure 4.1.2 shows about first part at home page which showing us the navigation bar (contains Home, About, Shop, Contact), cart icon and some small details about smart card with some button (Order Now, Contact Us).

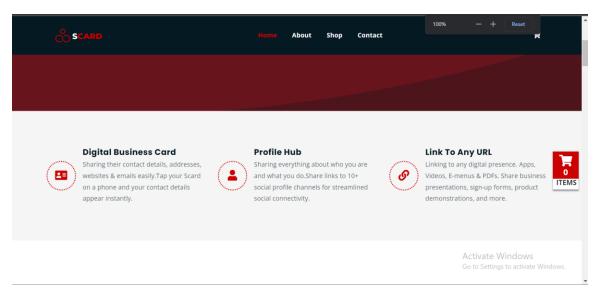
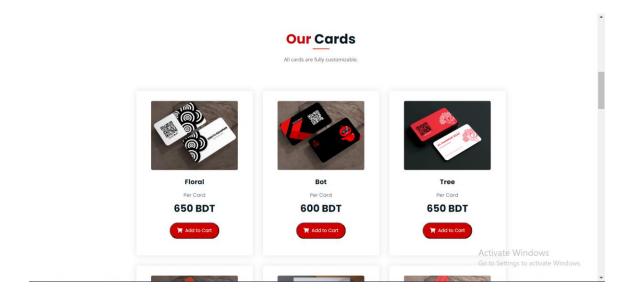


Figure 4.1.3 Home 2

Figure 4.1.3 explains second half of home page, which provides us with a brief overview of the Profile Hub, Link to Any URL, and Virtual visiting Card.



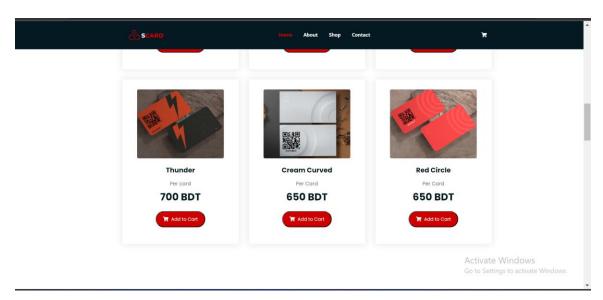


Figure 4.1.4 Home 3

Figure 4.1.4 talks about the card area, which is the third component of the home page. Among the card it shows the details these are an image of card template included name, prices of the card, additionally a button called Add to Cart.

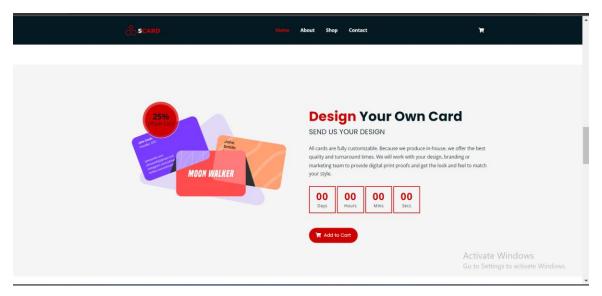


Figure 4.1.5 Home 4

Figure 4.1.5 explains content of homepage's fourth section.

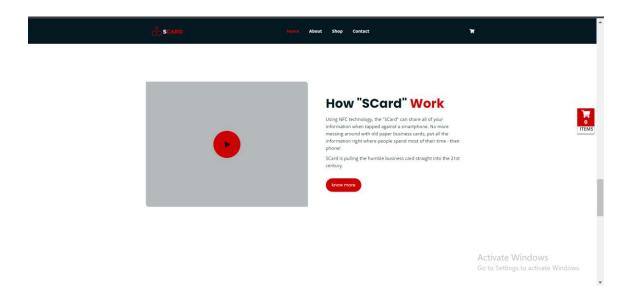


Figure 4.1.6 Home 5

Figure 4.1.6 explains fifth area of home page, which provides a video demonstration of the smart card's operation.

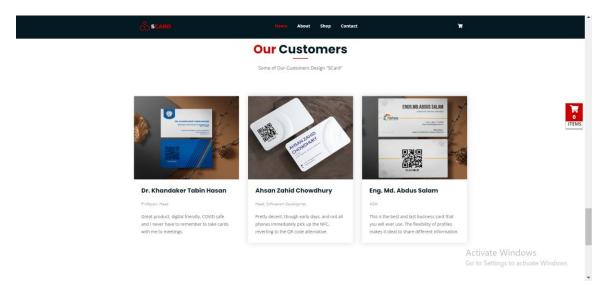


Figure 4.1.7 Home 6

Figure 4.1.7 reveals the customer reviews in the sixth part of the homepage.

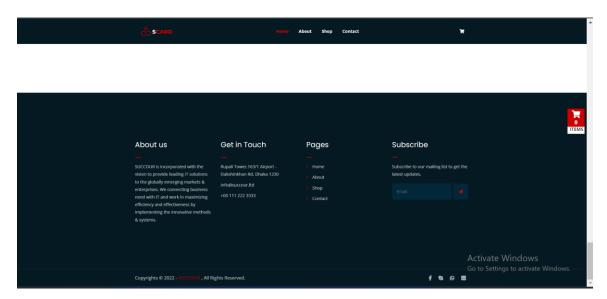


Figure 4.1.8 Footer of Home

Figure 4.1.8 reveals information about the home page's footer.

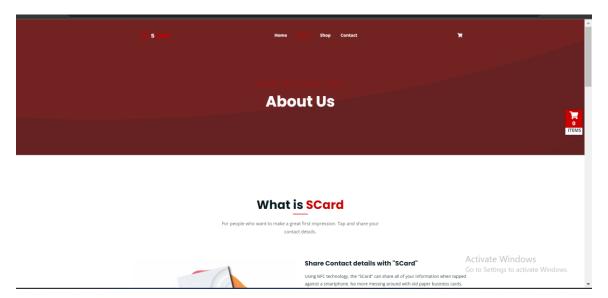


Figure 4.1.9 About Us

Figure 4.1.9 explains my website on this page about us.



Figure 4.1.10 About Us page (About smart card)

Figure 4.1.10 displays information regarding smart cards.

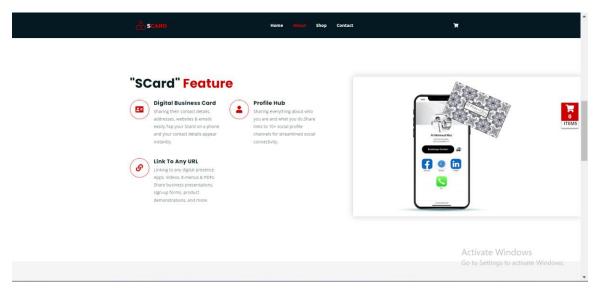


Figure 4.1.11 About Us page (About smart card feature)

Figure 4.1.11 explains every feature that a smart card can have.

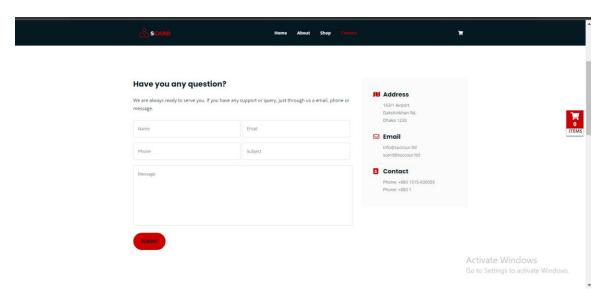


Figure 4.1.12 Contact Us

Figure 4.1.12 explains the contact method. If a user has any questions, they can fill out the form above to ask us.

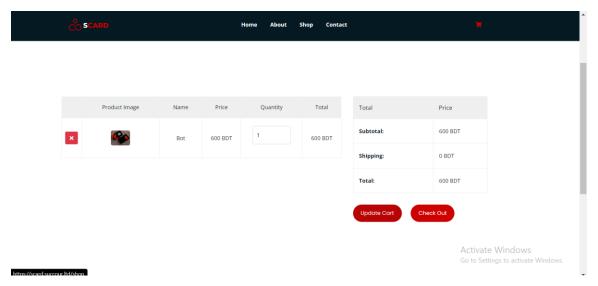


Figure 4.1.13 Cart details

Figure 4.1.13 displays cart section's information.

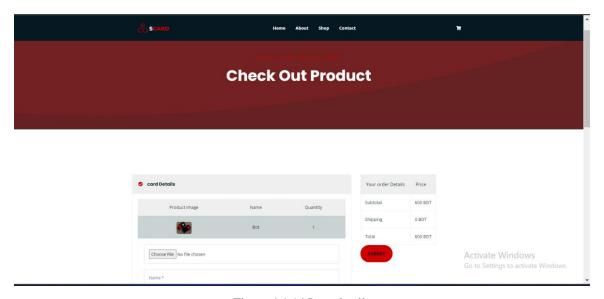


Figure 4.1.14 Item details

Figure 4.1.14 displays item information that the user has customized.

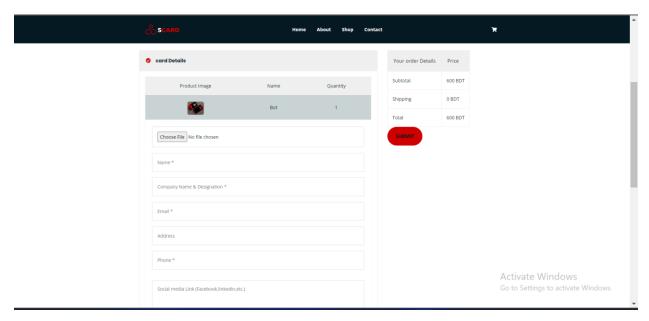


Figure 4.1.15 Card details form page

Figure 4.1.15 displays the card form data so you can fill it out in accordance with the form's criteria.

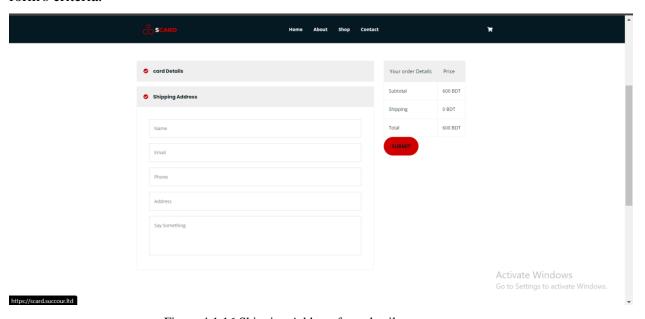


Figure 4.1.16 Shipping Address form details page

Figure 4.1.16 proves that this shipping address field appears after the card form is filled out and the submit button is clicked.

4.2 Back-end Design

To make this website workable I've used Php. [3] [8]

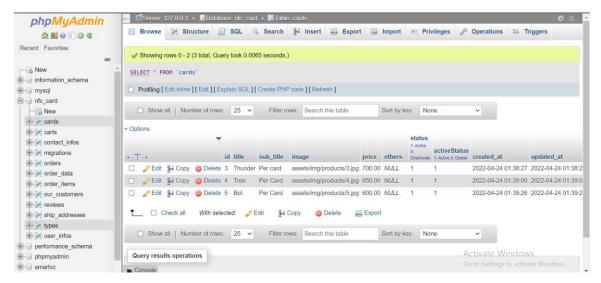


Figure 4.2.1 Card database details

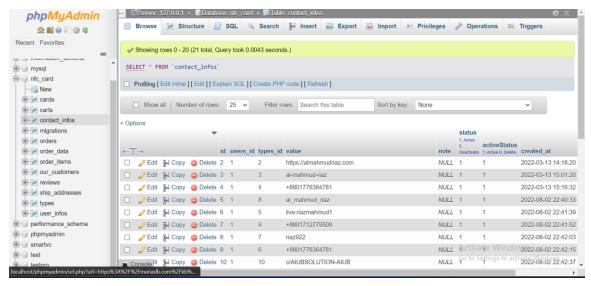


Figure 4.2.2 Contact information database details

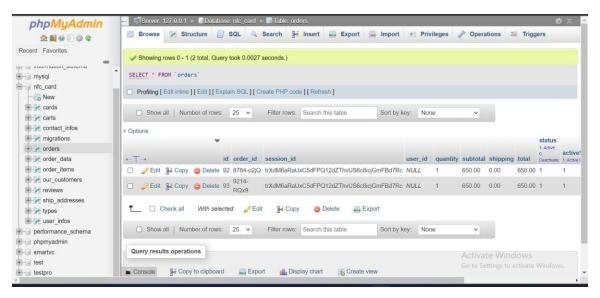


Figure 4.2.3 Order database details

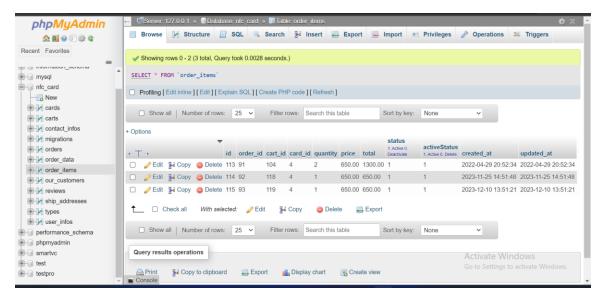


Figure 4.2.4 Order-item database details

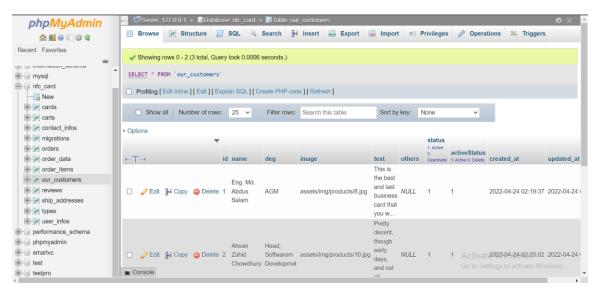


Figure 4.2.5 All customer database details

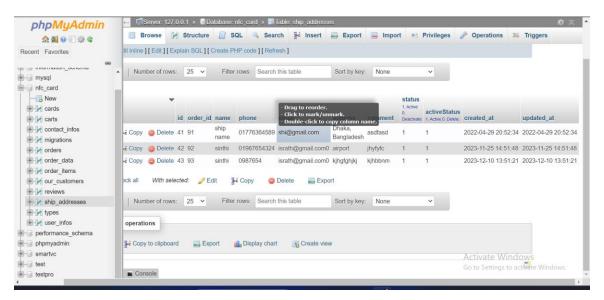


Figure 4.2.6 Shipment Address database details

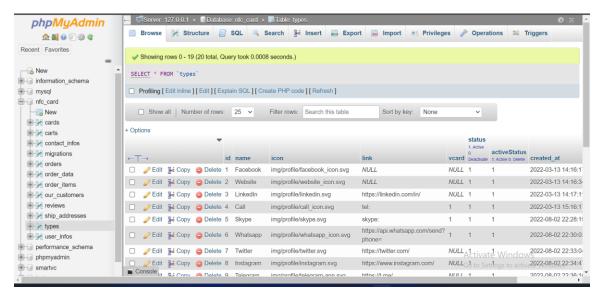


Figure 4.2.7 All types of social media link database details

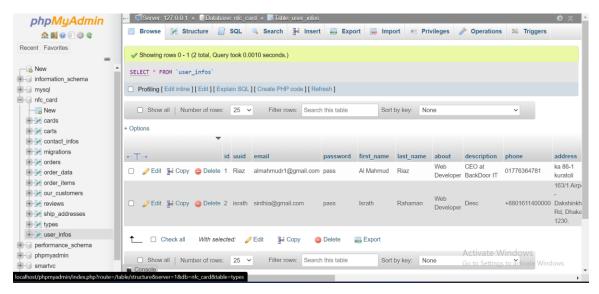


Figure 4.2.8 All types of user-information database details

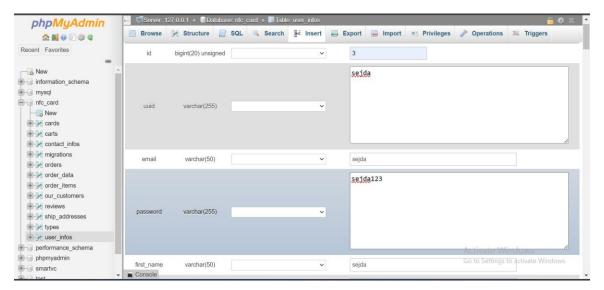


Figure 4.2.9 All user-information database details

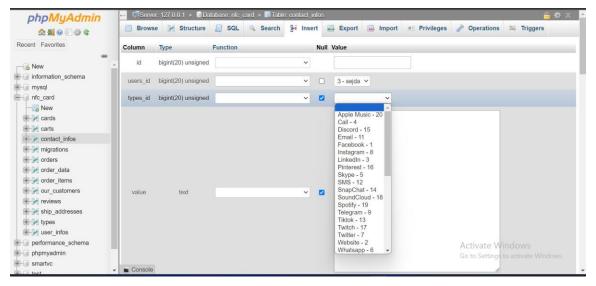


Figure 4.2.10 All contact information database details

4.3 UI/UX Design Diagram

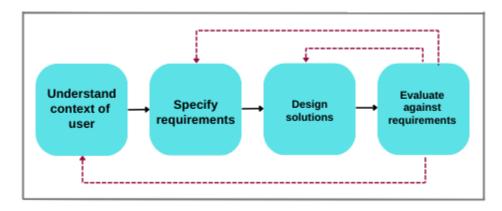


Figure 4.3.1 UI design

4.4 Implementation Requirement

My project idea required the effective use of many different kinds of tools, technology, and other resources. They help us to grow my productive project. I primarily discussed the tools, technology, and other elements I utilized to construct my project in this section on implementation requirements.

4.4.1 Hardware specifications

Every user must have at least one laptop or mobile device with an internet connection to access our website.

4.4.2 Software specifications

In order to use our website, you must have the following minimum software requirements:

- Google Chrome Browser or any other browser
- Windows 7 or earlier
- Internet Explorer

TESTING AND IMPLEMENTATION

5.1 Database Implementation

I have used a number of database management systems for the implementation of my project's database. PHP has been used by me. It is a safe, user-friendly, and open-source database management system. [3]

Figures 5.1.1 through 5.1.8 illustrate how my project database is implemented.

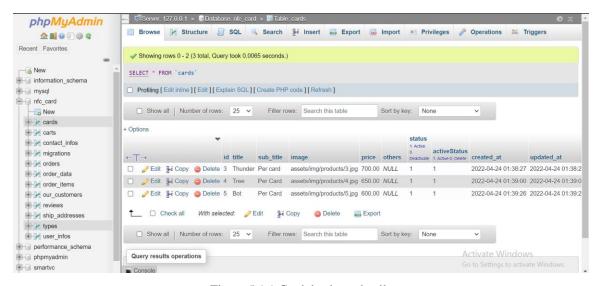


Figure 5.1.1 Card database details

Figure 5.1.1 shows all the details about card information.

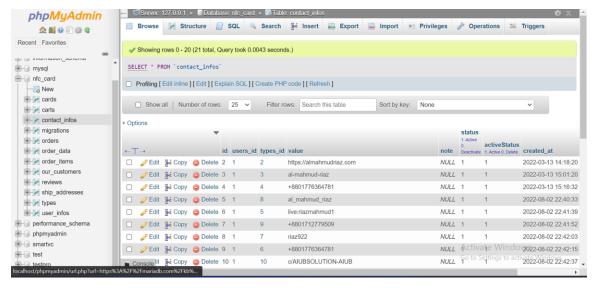


Figure 5.1.2 Contact information database details

Figure 5.1.2 shows all the details about contact information.

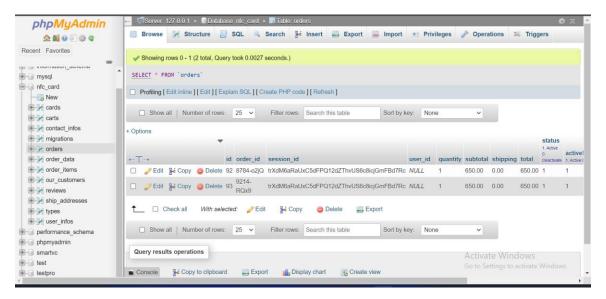


Figure 5.1.3 Order database details

Figure 5.1.3 shows all the details about order information.

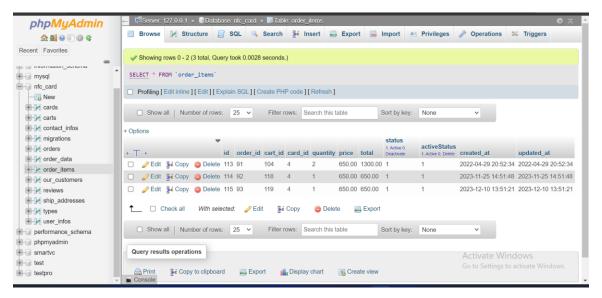


Figure 5.1.4 Order-item database details

Figure 5.1.4 shows all the details about order-item list information.

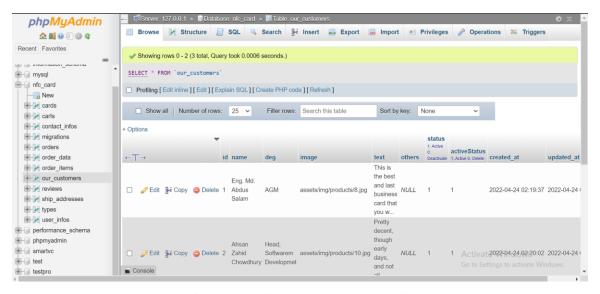


Figure 5.1.5 All customer database details

Figure 5.1.5 shows all the details about customer order information.

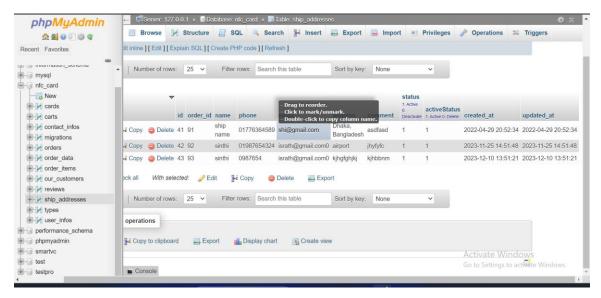


Figure 5.1.6 Shipment Address database details

Figure 5.1.6 shows all the details about customer order shipment address information.

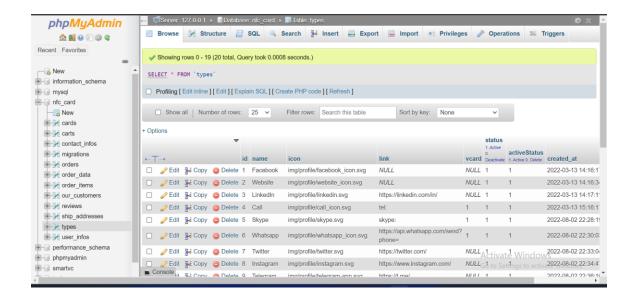


Figure 5.1.7 All types of social media link database details

Figure 5.1.7 shows all the details about all types of social media link information.

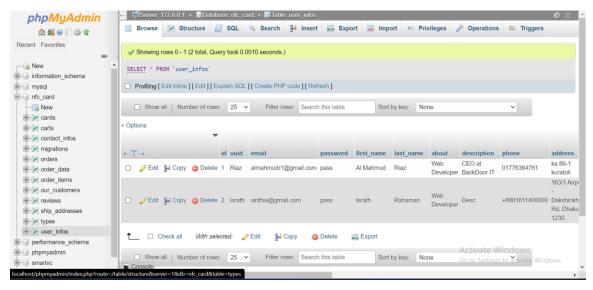


Figure 5.1.8 All types of user-information database details

Figure 5.1.8 shows all the details about all types of user information.

5.2 Testing Implementation

Table 5.2.1 Testing Implementation

No.	Action	Test data	Predicted	Action	Result
			outcome	output	
1	Home page	Browsing	Simple and understandable	Simply to use	Successful
2	Find card template	Card type	Card liked or not	Card liked	Successful
3	View cards	Selected cards	Visibility card info	Visit card	Successful
4	Arrange cart	Add, Update, Delete card	Cart updated	Updated cart	Successful
5	Card	Name, Email,	Fill up form	All	Successful
	information	Phone number, media links,	successfully	information giver	

		business details		successfully	
		and links			
6	Shipping	Name, Email,	Give shipping	Done	Successful
	form	Phone number,	address	successfully	
		address	successfully		
7	Purchase	Selected button	Purchase done	Purchase done	Successful
	order		successfully		
8	Handle	Update	Data update	Data updated	Successful
	Portfolio	information			

5.3 Testing Result and report

A formal description of the test results is included in the test report. The data in the report has been carefully and expertly evaluated by us. Together with the test's goal and conclusion, the report provides an operational state description. Every test conducted was non-functional. Since our project is not yet commercially active, a few more tests (stress testing, performance testing, and live server testing) are necessary.

DISCUSSION AND ANALYSIS

6.1 Effects on the Society

Beyond the benefits to the individual user, the creation and implementation of the Smart Visiting Card Web Application have an impact on society norms and contribute to more general networking and communication trends. The Smart Visiting Card Web Application brings new ideas to business communication and self-presentation. The web application encourages users to think imaginatively about how they portray their professional identity in a digital setting by combining dynamic content and multimedia features.

6.2 Impact on Environment

Because traditional paper business cards require a lot of paper and go through several printing processes, they contribute to environmental damage. By lowering dependency on paper-based cards, related to environmentally friendly methods, and assisting in the decrease of paper waste, our application encourages sustainability and related to conventional networking methods by switching from physical cards to a digital platform. So that we can decries the deforestation.

6.3 Ethical Aspects

The development and implementation of the Smart Visiting Card Web Application takes ethical principles and considerations into account. Users have choice over the visibility of their digital cards and are given clear information about how their data will be utilized. Before any interactions or data exchange occurs, informed consent is requested.

CONLUSION

7.1 Conclusion

This web program has an easy-to-use interface and solves the physical delivery issue with business cards printed on paper.. Most of the time it is annoying to convey the paper-based business card physically. Through this website people can customize their card with their personal information, addresses, social media links, professional information and so on as their preferences. People can easily bear this card with them. In this modern era, advanced mobile phone has a great feature called NFC (Near Field Communication). When the "smart card" is tapped against a smartphone, it may communicate all of your information thanks to this technology. Your data can be saved straight to your phone contact.

7.2 Scope for the Further Development

Increase the analytics capabilities by giving users more thorough information about how their digital cards are doing. Add capabilities that let groups and teams make cooperative digital cards. With a concentration on security, fairness, informed consent, and user confidentiality. A working environment that can be both secure and trustworthy is facilitated by user control mechanisms and transparent data handling procedures and more.

REFERENCES

- [1] Taner Perman, Laravel Basic Level for Everybody, MVC Basic, 4rd Edition, The Ebook Press, 2020, pp. 30-60.
- [2] Thomas A. Powell, HTML & CSS, Query Builder, 5rd Edition, The McGraw-Hill Press, 2020, pp. 19 70.
- [3] W3schools for php, available at << https://www.w3schools.com/php/>>, Last accessed on 12 June 2023 at 1:30pm
- [4]W3schools for html, available at << https://www.w3schools.com/html/ >>, last accessed on 25 June 2022 at 11:00pm
- [5] W3schools for CSS, available at << https://www.w3schools.com/css >>, last accessed on 18 January 2023 at 10:30am
- [6] W3schools for JS, available at<< https://www.w3schools.com/js >>, last accessed on 22 May 2023 at 08:40 pm
- [7] Canva for design, available at << https://www.canva.com>>, Last accessed on 2 August 2023 at 11:45am
- [8] XAMPP from internet, available at << https://www.apachefriends.org>>, Last accessed on 20 July 2023 at 12:45 pm
- [9] Intro, available at << https://introcardbd.com/>>, Last accessed on 30 January 2023 at 10:00 am
- [10] Mobilocard, available a t<< https://www.mobilocard.com/>> Last accessed on 30 January 2023 at 10:00 am

Virtual visiting Card

ORIGINALITY REPORT					
2% SIMILARITY INDEX	2% INTERNET SOURCES	0% PUBLICATIONS	2% STUDENT PAPERS		
PRIMARY SOURCES					
1 WWW.CO	oursehero.com		1 %		
2 Submitted to Liverpool John Moores University Student Paper		1 %			
dspace. Internet Sour	daffodilvarsity.e	du.bd:8080	1 %		