## AMAR SHOP AN E-COMMERCE WEB BASED APPLICATION

BY

### RASHEDUL ISLAM ID: 211-25-940

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

Supervised By

## Ms. Moushumi Zaman Bonny

Assistant Professor Department of CSE Daffodil International University

Co-Supervised By

Md. Tarek Habib Assistant Professor Department of CSE Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH 22<sup>TH</sup> JANUARY 2022

## APPROVAL

This Project titled "Amar Shop An E-Commerce Web-Based Application", submitted by Rashedul Islam, ID No: 211-25-940 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 M.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 22<sup>th</sup> January, 2022.

## **BOARD OF EXAMINERS**

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mornon

Md. Riazur Rahman (RR) Assistant Professor Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Dr. Mohammad Shorif Uddin Professor Department of Computer Science and Engineering Jahangirnagar University **Internal Examiner** 

**External Examiner** 

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### DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Ms. Moushumi Zaman Bonny, 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.

Supervised by:

Min

**Ms. Moushumi Zaman Bonny** Assistant Professor Department of CSE Daffodil International University

**Co-Supervised by:** 

**Md. Tarek Habib** Assistant Professor Department of CSE Daffodil International University

Submitted by:

Sillenter Hannar

Rashedul Islam ID: 211-25-940 Department of CSE Daffodil International University

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### ABSTRACT

Amar Shop is an online store application to sell goods. A web application is a very useful and required tool in today's environment, and it is growing more popular. During the COVID-19 crisis, customers are encouraged to buy online rather than in person due to health concerns, and the whole world is attempting to do business via the internet. As a result, we're working on creating a web application that will allow users to research products and make purchases. Customers may browse the whole inventory and read product details without the assistance of a salesperson. Through the usage of the Internet, the market will be able to be extended to a large geographic range. Events such as the various activities that are undertaken from time to time play an increasingly significant part in the development of any organization as online collaboration becomes more popular and the usage of information technology becomes more pervasive in many areas of our daily lives. The E-commerce Portal's primary function is to maintain track of product, customer, shipping, payment, and category data. It also has a few of additional objectives. It keeps track of every product, sales, category, and product information put into it. Because the project is completely developed at the administrative level, only the administrator has access to it. One of the project's goals is to design and construct an application program that will eliminate or minimize manual work in areas like product management, customer service, sales, and shipping. It keeps track of your shipping, payment, and category information.

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# CHAPTER 1 INTRODUCTION

### **1.1 Introduction**

Amar Shop web based application is an E-commerce project hosted on the web is designed to help online merchants manage their products, customers, sales, and shipments. Customers can create an account and begin using the app right away. They don't need to log in to view the products, but to place an order, they do. With the ongoing COVID-19 epidemic, all businesses are developing web-based applications to better serve their customers.

### **1.2 Objectives**

The ruling objective of "Amar Shop" E-Commerce web based application forming is to trade products to consumers through online platform. Most of the victorious web applications are thoroughly enhanced to accomplish a high ratio of trade through purchases. All the features and functionality needed to be updated with the latest operations and techniques available currently. Then the ratio of visitors trafficking and purchasing will be increased.

The intension of our web based system are:

- Ensure unblemished E-commerce customer purchase portal.
- Customer will have the control over the registration and order process.
- Customer will have control over their choice & purchasing process.
- Online & offline payment option.

#### **1.3 Motivation**

My motivation for this project stems from the fact that there are many developers in our country who are well-versed in their fields and have fresh ideas for a variety of new projects. They don't acquire business from big websites and clients because of their lack of experience. My primary goal for this web project is to create a suitable

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project that incorporates the latest web application development technology. The primary goal of the "Amar Shop" e-commerce web application is to do business by selling things to customers via the internet. The approximate project development entails demonstrating and hosting a web application for Amar Shop with Customer and Admin. We designed & modernized the application with Hyper Text Markup Language HTML, style sheet language CSS, modern JavaScript JS, Ajax, .Net, C#, Angular, SQLite as the back-end data storage (database).

#### **1.4 Anticipated Consequence**

According to the project our target is to ensure an UI to see product detail and continue shopping though online. Customers will be able to purchase product only after successful register and login. But they can view products without register or login. Anyone will be allowed to access the system from anywhere using web browser application as a client over internet. This application will be concerned of confidential data and the privacy of all the regular data in an effective way.

### 1.5 Sketch of Report

Practical knowledge and theoretical knowledge ha major difference in different situations. Throughout the life when we were educating get to gather verities of theoretical knowledge's which prepared us as skilled person. But we got the opportunity to use that skill and knowledge in the development of this project.

The first chapter of the documentation will be the discussion on the project's Introduction, Objectives, Related Motivation, Anticipated Consequence and the Sketch of the Report.

The second chapter comprises the Organization's Events Scenario, which includes an introduction, a collaboration event, related works, comparative studies, the scope of the problem, and our project's challenges.

The Third chapter contains all about Requirement Specification which are Use Case Modeling and Description, Logical Data Model, Design Requirements.

Fourth chapter is all about designing delineation of web application. This discussion will include Front-End designing, Back-End designing and the designing dependencies & requirement of implementation for both Back and Front-End.

Accomplishment with Testing is the chapter which contains Database Accomplishment, ER Diagram, Front-End and Testing accomplishment. It will also describe the testing report with the corresponding results.

Conclusion and subsequent area of the project is demonstrated in the final chapter. This will also contain our systems problem, solution and the system using.

# CHAPTER 2 BACKGROUND

### **2.1 Introduction**

Amar Shop an E-Commerce web based application which fully functioned to trade with buying and selling of products and corresponding services, or the circulating of official funds or data, over the electronic web work, first and foremost the internet. It is the most rapidly growing field. Verities of companies are developing web applications with the online shopping and trading characteristics. They are thinking out of the box to take the product purchasing and selling into the consumers door to door.

## 2.2 Events Scenario of Organization

E-commerce formed with many transactional operations. With the real time scenario the consumers and owners are not communicable and shareable each other. This is too much difficult for communicating different customers at same time. So, this is quite burdensome to play with the situation detached and switching to online can minimize even can solve the problem.

### **2.3 Collaboration Event**

The controller as administrator and users makes up the Amar Shop Web based Application. It is impossible to show diverse products and give different services to different customers on a consistent basis. The product review, purchasing, and payment processes will all be aided by this system.

### 2.4 Related Works

There are several works online related this topic. It's a now trending marketing strategy especially because of COVID-19 situation. Single & multiple layer and related operations differentiate those web applications with others.

### 2.4.1: Popular Related Websites

Figure 2.1: is a website screenshot. Ryans Computer is a web application in Bangladesh.[1] Same as Pickaboo, GSM Arena etc. [2][3] They sell technical complete products & accessories online & offline. They are one of the top brand shops in this field. It helps me to research and develop such an application.

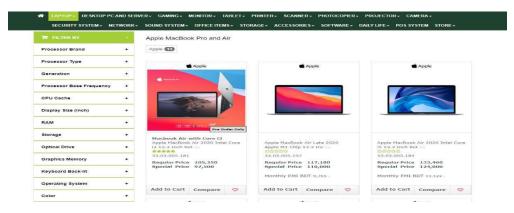


Figure 2.1: Ryans Computer UI

It's totally free & no need any subscription. No need to Register or Login to view products. But Registration and Login is mandatory to purchase any product.

### **2.5 Comparative Studies**

Firstly, The Website like Amar Shop is an untied System from many barriers and obstacles, and anyone is allowed to access the system from the browser from anywhere. It will take only the online supportively. Secondly, this developed product is really inexpensive & easy to go through after proper installation. The overall ©Daffodil International University 5

system will be maintained and managed by the admin authority and the consumer will be able to use it with or without registration and login. Users or customers will be participated with the system and though the system is single layer architecture based. Any single controller can easily maintain the whole system. And lastly, the system is free from other additional expenses for any business.

### 2.6 Complications

### • Try Exception handle with Try Catch block:

Mainly try catch block contains any unit of codes with an operation. If the operation breaks the system usually crashes but because of try catch the system will be running with handling the exception with proper instructions. This is very basic code of conduct for the exception handling process.

### • Memory caching with Redis server:

Usually, server occupies server memory through allocations. Any PC can be responsible for the running of any application at a time. We managed to go with Redis in memory data structure store more user's cart and before order processing. For the industrial use it's suggested to use micro service architecture with the application and we followed to maintain that. And it's due to provide proper server speed.

### 2.7 Problem Scopes

1) To avoid the system crashing after adding wrong data we introduced Exception handling though try catch block.

- 2) Real life details addition difficulties through Database
- 3) Used Redis structured data server for memory caching
- 4) No permission on the Roll basis
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# CHAPTER 3 REQUIREMENT SPECIFICATION

## **3.1 Collection and Identification of Requirements**

First of all, we had to choose a proper framework for the full stack development. Going through the requirements we found .NET Core and Angular is the perfect match for such development. For the OS selection we have chosen windows operating system as container.

### **3.2 Flow Chart**

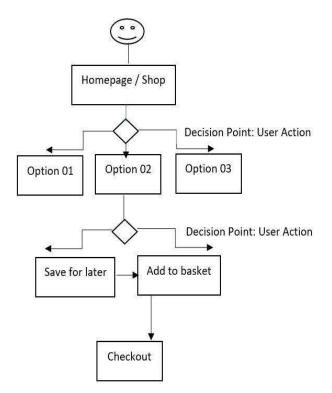


Figure 3.1: Flow Chart

Figure 3.1 shows the flow diagram of our desired application and different operations in a sequence flowchart wise. User are allowed for sign up and login to the ©Daffodil International University 7 corresponding user account. User will be able to browse products and they can add the product to the basket and checkout. That will lead user to the delivery & payment option. [23]

### 3.3 Design Model with Use Case Diagram

Different types of user can interact with the system in order to solve the real life problem and the use case model demonstrate that scenario. Controller and user interact with the system with the proper instructed guideline. [22]

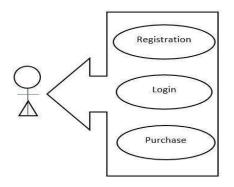


Figure 3.2: Consumer Use-case Design Diagram

Details of Use-Case:

Name of Use-case: Consumer use case

Actor/Actuator: Consumer/Customer

Pre-condition: None

Initial Path:

- 1. Provide Login ID
- 2. Provide Password
- 3. Process through "Login" or "Register" button

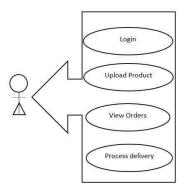


Figure 3.3: Admin Use-Case Design Diagram

Details of Use-Case: Name of Use-case name: Admin use case Actor/Actuator: Admin Pre-condition: None Primary Path: 1. Provide Login ID 2. Provide Password

3. Process through "Login" button

### **Use Case Description:**

**Register**: If the user is complete new user & try to purchase anything need to go for register process where information will be asked like email, password.

**Login**: Consumer & Admin both need to be logged in to do any operational process. System verifies the credentials for login. If verification passes than give access otherwise shows regarding alert messages.

**Browse Product**: User can browse all products even without any login or register process. Also can see regarding offers.

Search Products: User can even search product initially with different filtering. No need to be logged in user.

**View Shopping Cart**: User can see the shopping cart either the Cart is holding any product already or not.

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Add Shopping Cart: User will be able to add any product if wants. But he need to be logged in to do the further process.

**Checkout**: User will be going throw the checkout process by providing additional information like addresses, quantities, delivery methods etc.

Verify Credit Card: Then it's time for payment with verifying Credit card information.

**Ship Product**: If the previous all process goes well then admin initiates the Shipment process. He ships the product to the provided shipment address.

## 3.4 Database Diagram

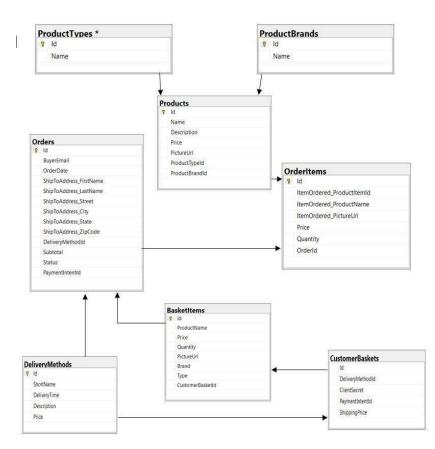


Figure 3.4: Database Design Diagram

# CHAPTER 4 DESIGN SPECIFICATION

### 4.1 Designing of Front-End

The most used Standard Markup Language is Hypertext Markup Language or HTML. It is used for designing of documents for a web browser visualization. Technologies like as JavaScript scripting languages and Cascading Style Sheets can easily manipulate or interfere the HTML. [4]

The documentation on a web page is written with HTML but those documents presentation mostly depends on Cascading Style Sheets. CSS is the mainspring technology with the use of HTML and javascript on the World Wide Web. [5]

TypeScript base web app developing framework which is open source and totally free of cost and led by the individual's community and corporations and Angular Team at Google is Angular. It is a frequent choice framework for designing single page applications. AngularJS and Angular are fully different though they belongs to the same team [6]. So far, we have developed our Front-End with this UI framework.



Figure 4.1: Home Page

This is the application's home page. It's also known as an offer page because it's where all of the offer banners are displayed. This is a slider that will show all of the

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offers in turn. There will also be a Login and Signup button for people who are not logged in. However, after the user is logged in, this button will vanish.

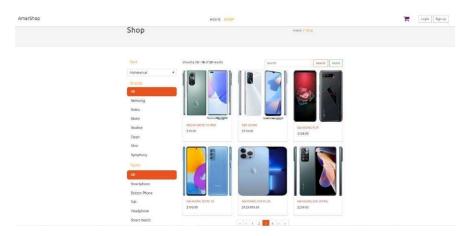


Figure 4.2: Shop Page

This is the shop's main page. The consumer will be able to explore the desired product from this page. This page has a search function that uses the term. Filtering options include product brand, product kind, and even alphabetical order. By selecting a certain product, the user can view product details.

AmarShop		HOME SHOP		F	Login Sign up
	Login		Home / <mark>login</mark>		
		Login Email address Password Sign in			

Figure 4.3: Login Page

If a person has already registered but has not yet logged in, the user will be able to see the Login button and authenticate using the Login page. If the user enters an incorrect email address or password, a notice will appear, and a successful login will allow the user to purchase a user.

AmarShop		HOME SHOP	Login Sign up
	Register		Home / register
		Register Display Name Email address Password	
		Register	

Figure 4.4: Register Page

However, if the user has not yet registered, the user will be able to view the Login and Sign-Up buttons and will be authenticated through the Register page. If the user enters an incorrect email address or password, an alert will appear, and if the user registers successfully, the user will be able to purchase a user.

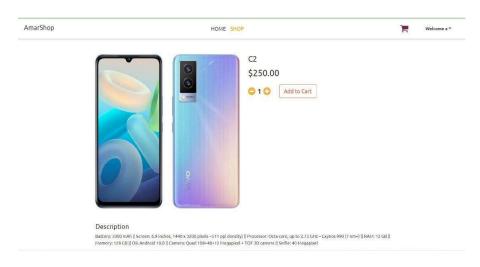


Figure 4.5: Product Details Page

The user will be able to see the product information in greater detail on the product details page. The user can alter the quantity and add it to their shopping or basket. After selecting the Add to Cart option, the user will be taken to the Cart page.

AmarShop		HOME SHOP				👷 Welcome a *
	PRODUCT	PRICE	QUANTITY	TOTAL	REMOVE	
	C2 Type: Smartphone	\$250.00	010	\$250.00	Ô	
			ORDER SUMMARY			
			Shipping costs will be checkout	added depending o	n choices made during	
			Order subtotal		\$250.00	
			Shipping and handlin	ıg	\$0.00	
			Total		\$250.00	
				Proceed to checkou	et 📃	

Figure 4.6: Add to Cart/Basket Page

The product quantity, as well as the price subtotal and total, will be displayed on this page. From this UI, the user will be able to adjust the product quantity. The user can also opt to remove a product from their cart or proceed to the checkout process.

AmarShop			HOME S	НОР			2	Welcome a *
	Checkout				Home / <mark>Checkout</mark>			
	ADDRESS Shipping address	DELIVERY	REVIEW	PAYMENT Save as default address	ORDER SUMMARY Shipping costs will be added on choices made during chec			
	Rashedul Street 9	~	Islam Gity Niketon	× ×	Order subtotal Shipping and handling	\$250.00 \$0.00		
	State Dhaka <back basket<="" td="" to=""><td>~</td><td>Zlp code 1202</td><td><b>✓</b> Go to delivery&gt;</td><td>Total</td><td>\$250.00</td><td></td><td></td></back>	~	Zlp code 1202	<b>✓</b> Go to delivery>	Total	\$250.00		

Figure 4.7: Checkout-Address Page

After you complete the checkout process, the program will look for a shipping address to deliver the items to. This UI shows the order summary, which includes the subtotal and total. After finishing this step, the user can select Delivery details option.

AmarShop		HOME SHOP		Welcome a *
	Checkout		Home / Checkaut	
	ADDRESS DELIV	REVIEW PAYMENT	ORDER SUMMARY	
	Choose your delivery me UP51-\$10.00 Fastest delivery time	thod UPS2 - \$5.00 Get it within 5 days	Shipping costs will be added depending on choices made during checkout	
	UP53 - \$2.00 Slower but cheap	FREE - \$0.00 Free! You get what you pay for	Order subtotal \$250.00 Shipping and handling \$0.00	
	<back address<="" td="" to=""><td>Ge to review &gt;</td><td>Total \$250.00</td><td></td></back>	Ge to review >	Total \$250.00	

Figure 4.8: Checkout-Delivery Page

The user will have several delivery methods with different time schedules and cost variations in the Delivery UI. The user can review his order with a summary after picking the right delivery mode.

AmarShop	HOME SHOP						Welcome a ▼
Chec	kout			Home / Checkout			
ADI Terre on Cal	DRESS DELIVERY	REVIEW	PAYMENT	ORDER SUMMARY Shipping costs will be addeed on choices made during chev			
4242 4242 < Back to	2 4242 4242 Review	10/22	122 Submit order >	Order subtotal Shipping and handling Total	\$250.00 \$0.00 \$250.00		

Figure 4.9: Checkout-Payment Page

The payment option is now available to complete the order procedure. There will be sections where you can enter your credit card information to pay your bill. The order summary will be available to review on the right side. If all goes smoothly, the user can place an order if he or she so desires.[28][29][30]

AmarShop	HOME SHOP		F	Welcome a 🔻
	Success	Home / Checkout / success		
	Thank you. Your order is confirmed Your order has not shipped yet, but this is to be expected as we are not a real store View your order			

Figure 4.10: Order Confirmation Page

After completing all of the steps, the order will be completed and displayed in the Confirmation UI. The option view your order will lead the user to the order details page if the user wants to examine the order status with details.

AmarShop	HOME SHOP						Welcome a *
	Order# 23	- Pendir	ıg	Home / Orders / Order#23 - Pending			
	PRODUCT	PRICE \$250.00	QUANTITY 1	TOTAL \$250.00	ORDER SUMMARY           Shipping costs will be added depending on choices made during checkout           Order subtotal         \$250           Shipping and handling         \$0           Total         \$250	.00	

Figure 4.11: Order Details Page

The order details page provides an overview of the order as well as an order summary.

AmarShop	HOME SHOP	Welcome a *
	Name of the product Display Name	
	Product description	
	Description .	
	Price	
	0	
	Brand	
	Select brand •	
	Product type	
	Select product type •	
	Choose File No Tile chosen	

Figure 4.12: Add Product Page

The Add Product UI is only available to the application's owner or controller. Through this UI, he will be able to upload any product to the system. This menu and the operation are not accessible to regular users.

AmarShop		HOME SHOP		1	Welcome a 🔻
	Product-list		Home / product-list		
	Name of the product :	Product Description :	Price :		
	Q	Battery: 5000 m/h    Screen: 6.9 inches, 1440 x 3200 pixels – 511 ppi denoty)    Processor: Octa core, up to 2,73 Crk – Exyros 990 (7 mm)    RAVi: 12 CB    Memory: 128 CB    OS-Android 10.0    Camera: Quad 108+48+12 Megupixel + TOF 3D camera    SetPie: 40 Megapixel	250		
	GEO 2	Battery 5000 mAh    Screen: 6.9 mcHes, 1440 x 3200 pixels – 511 ppi density)    Processor: Otta core, up to 2.73 Cite – Expros 9940 (* mm-)   EAU 1: 12 Gil    Vemory: 128 CB    OS: Android 10.01    Camera: Quad 108+48+12 Megapixel + TOF 3D camera    Selfie: 40 Megapixel	180		
	M 20	5151	н		
	613	Battery: 5000 mAh    Screen: 6.9 Inches, 1440 x 3200 pixels ~ 511 ppl density    Processor: Octa zone, up to 2.73 Octa - Express 994 (7 mm    TRAH: 12 GB    Memory: 128 GB    OS: Android 10.0    Camera: Quad 108+48+12 Megapixel + TOF 3D camera    Selfie: 40 Megapixel	300		
	MI Alpha	Battery: 5000 mAh    Soreer: 6.9 inches, 1440 x 3200 pixels –511 ppi density)    Processor: Otta core: up to 2.73 Otta – Expros 990 (* nm +)    RAU: 12 (2 (ii) Memory: 128 CB    05: Android 10.0;    Camera: Quad 108+48+12 Megapixel + 10F 3D camera    Setfic: 40 Megapixel	10		
	20 total		N ( 1 2 3 4 > N		

Figure 4.13: View All Product Page

This View All Product UI allows the administrator or controller to see all of the products and their details. This menu or UI is not visible to regular users. This is a list of all the products that have uploaded by admin or controller.

AmarShop

HOME SHOP

Welcome a \*

Order	Date	Total	Status	
# 23	Jan 9, 2022, 10:50:17 PM	\$250.00	Pending	
# 1	Dec 5, 2021, 9:33:36 PM	\$460.00	Pending	
# 2	Dec 5, 2021, 9:33:36 PM	\$445.00	Pending	
#3	Dec 5, 2021, 9:33:36 PM	\$355.00	Pending	
# 4	Dec 5, 2021, 9:33:36 PM	\$205.00	Pending	
# 5	Dec 5, 2021, 9:33:36 PM	\$335.00	Pending	
# 6	Dec 5, 2021, 9:33:36 PM	\$390.00	Pending	
# 7	Dec 5, 2021, 9:33:36 PM	\$205.00	Pending	
# 8	Dec 5, 2021, 9:33:36 PM	\$210.00	Payment Received	
#9	Dec 5, 2021, 9:33:36 PM	\$349.99	Payment Received	
# 10	Dec 5, 2021, 9:33:36 PM	\$33.00	Payment Received	
# 13	Dec 5, 2021, 9:33:36 PM	\$150.00	Pending	
# 14	Dec 5, 2021, 9:33:36 PM	\$600.00	Pending	

Figure 4.14: View All Orders Page

This is the UI where the admin or controller may see all of the order statuses, including the most recent date, quantity, and delivery status. Regular users won't be able to use this interface.

#### 4.2 Designing of Back-End

In this web application we used .Net Core framework for API designing and used SQLite database for database or data store designing. Also user Redis server for smart & efficient memory data structure caching.

.NET Core is widely used open source cross platform software developing framework for Windows, Linux, and mac OS operating systems. The successor version of .NET Framework is .NET Core. [7]

SQLite database is used to design our desired application. SQLite is widely used database management system which is relational. Mainly it follows the syntax of PostgreSQL syntax. It is attached with the program rather than database engine those are client server. [8]

For the purpose of in memory use of data-structure store widely used application tool is Redis which works as key value database on in memory alongside cache memory and have resilience which is elective. Abstract data structures like streams, strings, sorted sets, lists, maps, HyperLogLogs, spatial indices, bitmaps and sets are Redis supported. [9]

## 4.3 Designing Dependencies & Requirement of Implementation

For the Front-End development we had these dependent packages-

Angular-animations,  $V_{.} = 11.2.1$ Angular-cdk, V = 11.2.2Agular-common, V = 11.2.1Angular-compiler, V = 11.2.1Angular-core,  $V_{.} = 11.2.1$ Angular-forms, V = 11.2.1Angular-platform-browser, V = 11.2.1Angular-platform-browser-dynamic, V. = 11.2.1 Angular-router, V = 11.2.1Bootstrap, V = 4.6.0Bootswatch,  $V_{\cdot} = 4.6.0$ Font-awesome,  $V_{.} = 4.7.0$ ngx-bootstrap, V = 6.2.0ngx-spinner, V = 10.0.1ngx-toastr, V. = 13.2.0 rxis, V. = 6.6.0tslib, V. = 2.0.0uuid,  $V_{.} = 8.3.2$ xng-breadcrumb, V = 6.6.0zone.js, V. = 0.11.3

For the Back-End development we had these dependencies-

Stripe.net V. = 39.38.0

AutoMapper.Extension.Microsoft.DependencyInjection V. = 8.1.1System.IdentityModel.Tokens.Jwt V.= 6.8.0Microsoft.AspNetCore.Authentication.JwtBearer V. = 5.0.1Microsoft.AspNetCore.Authentication.OpenIdConnect V. = 5.0.1Microsoft.EntityFrameworkCore.Design V.= 5.0.1Swashbuckle.AspNetCore V.= 5.6.3Microsoft.AspNetCore.Identity Version = 2.2.0Microsoft.EntityFrameworkCore.Sqlite V.= 5.0.1Microsoft.IdentityModel.Tokens Version = 6.8.0Npgsql.EntityFrameworkCore.PostgreSQL V.= 5.0.2StackExchange.Redis V.= 2.2.4

When we design a software or a system, we consider some requirements to make the project efficient. We have tried to build a user-friendly web application. Our system user interface is very simple that everyone can use it without facing any problem. For better knowing, we have drawn method operations model, illustration of use-case, activity diagram and logic exposal data model. We have used to SQLite for designing our database. Hyper Text Markup Language HTML, style sheet language CSS is used for the visual of the application. OOP, .NET Core framework and C# for back-end design was most appropriate for the development.

# CHAPTER 5 IMPLEMENTATION WITH TESTING

## 5.1 Database Implementation

SQLite database is used to design our desired application. SQLite is widely used database management system which is relational. Mainly it follows the syntax of PostgreSQL syntax.

## 5.2 ER Diagram

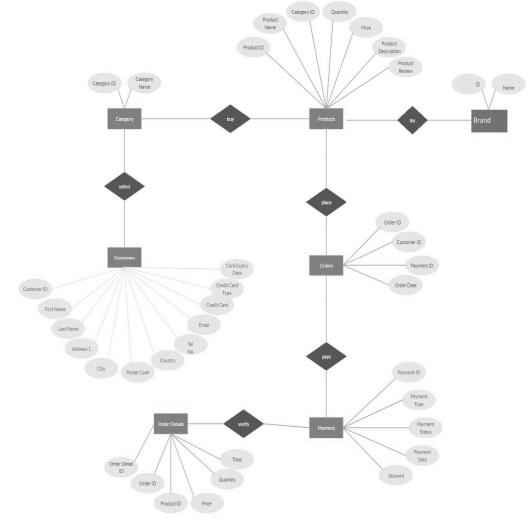


Figure 5.1: ER Diagram for Amar Shop [24]

### **5.3 Implementation of Front-End**

Backend was designed initially and then web template took part in the development process. Angular is used for front end and .Net Core fore backend development.

### 5.4 Implementation of Testing

Amar Shop firstly introduced with operational testing through the development process. It mainly checks the operations and running logic of functions. Postman software and Swagger UI are widely used ingredients for testing and I also used those to the process of development.

### 5.5 Test Reports with Results

Overall, the result of testing shown in Table: 1 fulfilled the requirement. Can't say any application is out of bug. But it can be said as lower ration. QA Tool can provide more reliable and frequent output. And throughout the real time journey of fixing those bugs this project can be in the safe zone apart complication.

SL	Test Case	Input	Expected Outcome	Actual Outcome	Result
01	Registration Check	Invalid Email	Invalid Shows	Shows Invalid	Successful
02	Registration Check	Valid Email	Signup Successful	Successful & Redirect	Successful
03	Login Check	Invalid Email	Invalid Shows	Shows Invalid	Successful
04	Login Check	Valid Email	Login Successful	Successful & Redirect	Successful
05	Browse offer	Without login	Shows Offer	Shows Offer	Successful
06	Browse offer	After login	Shows Offer	Shows Offer	Successful
07	Browse Products	Without login	Shows Product	Shows Product	Successful
08	Browse Products	Press Shop	Shows Product	Shows Product	Successful
09	Purchase Products	Without login	Ask login	Ask login	Successful
10	Purchase Products	After login	Sends Checkout	Sends Checkout	Successful
11	Checkout Address	Address Input	Ask Payment	Ask Payment	Successful
12	Checkout Payment	Card Info	Done Payment	Done Payment	Successful
13	Confirmation	Done Payment	Show Confirmation	Shows Confirmation	Successful
14	View Order	View Order	Show Details	Show Details	Successful
15	Add Product	Product Info	Added Successfully	Added Successfully	Successful
16	View All Products	View Product	Show All Products	Show All Products	Successful

Table 1: Test Result for Amar Shop

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# CHAPTER 6 IMPACT ON SOCIETY AND ENVIRONMENT

### **6.1 Social Influence**

In the ongoing circumstances single layer web portal like Amar Shop isn't modernized and auto learned. Controller and Customers will get the advantage and will be user friendly to supervise the system if the project is developed. Especially because of COVID- 19 pandemic it can be much constructive with less risk of facing physically. It can save our valuable time and money as well. It can have impact on reducing the travelling expenses and beneficiary for customer if they are able to purchase the desired product from anywhere rather than shop physically.

### **6.2** Environmental Influence

Community based environment will have major consequence on civilized circumstances. The civilized circumstances refers to the immediate tangible and civilized setting in which people reside or in which something occurs or originates or evolves. It includes the civilization that the solitary was enlighten or reside in, and the humans and establishment with whom they interconnect. Any uncooperative or unenthusiastic influence will not be found because of the developed project.

# CHAPTER 7 CONCLUSION & FUTURE SCOPES

### 7.1 Conclusion

As a total, contemporary organizations must strive to build the next best item that customers will ask for, because customers expect their ingredients, solutions, and help, among other things, to be superior, quick, and affordable at all times. Commercial thinking must allow way for new client hunger and bias since it will demonstrate beyond a shadow of a doubt that it is necessary for their professional success and longevity. Ecommerce is rapidly evolving and becoming more important to trade as technology advances, and it is something that must be prioritized and completed. Amar Shop's visual and functional components include HTML markup, CSS style sheets, JS programming, C#, Typescript, .NET, Angular, and SQLite database. Our goal was to create a new technology-based module for Amar Shop, and we worked toward that goal.

#### 7.2 Future Scopes and Horizons

Amar Shop Web Application will have impact on the threat & danger of physical communication, it will be unchallenging for those user or customer and controller will get advantage. In Bangladesh website like Ryans, Startech have regular ingredient like Amar Shop. But I have further plan for this website which could make this poles apart from others. Have few thought in planning for time ahead:

1) Chatting Feature

- 2) Administrative dashboard with different features
- 3) Application compatible for all operating system
- 4) Shift this application to multi-layer application.

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