



Department of Computer Science & Engineering

UNIVERSITY OF LIBERAL ARTS
BANGLADESH

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Project Title
Blissful Essentials

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Blissful Essentials

1. Introduction

The purpose of this application will be to create a user-friendly application for makeup and skincare lovers who are extremely conscious about the face and body skin. This website will motivate and enable them to purchase safe and authentic products for their skin at a reasonable price along with real-time and quick consultancy service for skin health queries. This website is built based on HTML, CSS, JavaScript, PHP and MySQL to make the application more interactive and user friendly.

The customer can search for their required product, add them to cart, update or delete them. They can purchase the product through bKash or Nagad also can view the order status. Main thing that makes this website different from other e-commerce website is that the customer can take a consultation from the admin through quiz to know which product will be best for specific skin condition. To do that the user have to sent messages and then the admin will share a google form though the website. After completing the form, an email will be sent to the consumer with some tips and product suggestions which is available to them. From the admin panel, the admin can add, remove or update the product. At the same time, they can track which product is yet to deliver and which is successfully delivered.

2. Project Scope

- This website will set a culture and example of ensuring and providing proper and safe consultancy from certified beauty consultants regarding face and body skin and offering products to the customers in the skin care market of Bangladesh.
- The application will open earning opportunities for the moderators and the beauty specialists.
- It will save time of the users as this application will be specially made with the feature of providing skin care, and makeup products with specialized consultancy services on skin under one roof.

3. User Scenario/ Feature

3.1 Customer Scenario:

Let's say Sophia, a makeup and skincare enthusiast, has heard about a new online platform specifically tailored for individuals who are meticulous about their skincare routine. Eager to explore this website, she logs on to the platform.

1. Homepage and Navigation:

- Sophia is greeted with a visually appealing homepage that showcases various skincare and makeup products.
- The navigation menu is intuitive, allowing her to easily explore different sections of the website such as "Products", "Consultation", "Order", "My Account", "cart" and "search option".

2. Product Search and Selection:

- Sophia navigates to the "Products" section to search for specific skincare products she's interested in.
- Using the search bar, she inputs keywords related to her desired product, such as "moisturizer" with brand name.
- The website presents her with a range of options, complete with detailed product descriptions, ingredients, and customer reviews.
- Sophia finds a suitable moisturizer and adds it to her cart with just a few clicks.
- Then again, she removes another moisturizer of different brand from the cart that she added before.

3. Consultation Service:

- Intrigued by the consultation service offered by the website, Sophia decides to seek advice for her specific skin concerns.
- She accesses the "Consultation" section and push her username, mail address and initiates a conversation with the admin through a messaging interface.
- The admin promptly responds, guiding her through a series of questions designed to assess her skin type, concerns, and preferences through a google form.
- Upon completing the consultation, Sophia receives a personalized email with skincare tips and product recommendations tailored to her needs.

4. Checkout and Payment:

- With her desired products in the cart, Sophia proceeds to the checkout page.
- She selects her preferred payment method, choosing between options like bKash or Nogod for a seamless transaction.
- After confirming her order, Sophia receives a confirmation message with details of her purchase.

5. Order Tracking:

- As she eagerly awaits her package, Sophia can track the status of her order through the "Orders" section.
- Here, she can view updates on the processing and delivery of her products.
- Once her order is successfully delivered, Sophia views the updated status, ensuring a smooth and satisfying shopping experience.

Overall, Sophia finds the website to be user-friendly, informative, and trustworthy, making it her go-to destination for all her skincare and makeup needs.

3.2 Admin Panel Scenario:

Let's say Ima, the administrator of the makeup and skincare platform, accesses the admin panel to manage products, provide consultations, and track orders efficiently.

1. Product Management:

- Upon logging into the admin panel, Emma navigates to the "Product Management" section.

- Here, she can add new products to the inventory by entering details such as product name, description, price, and available quantity.
- Emma also has the option to update existing product information or remove products that are no longer available.
- With a user-friendly interface, she can easily organize and categorize products to enhance the browsing experience for customers.

2. consultation Service:

- In the "Consultation Service" section, Emma can view incoming messages from users seeking skincare advice.
- She responds promptly to each inquiry, guiding users through the consultation process with relevant questions and recommendations.
- To streamline the process, Emma utilizes pre-defined templates for common skincare concerns, ensuring consistency and efficiency in her responses.
- After the consultation is complete, Emma generates personalized skincare tips and product suggestions for users, enhancing their shopping experience.

3. Order Tracking and Management:

- Emma monitors the status of incoming orders through the dashboard.
- Here, she can track orders from processing to delivery, ensuring timely fulfilment and customer satisfaction.
- With access to comprehensive order details, including customer information and purchase history, Emma can provide excellent customer service and address any concerns efficiently.

4. User Management

- If Emma feels to remove any user from the website who is no longer following their rules or no longer user the website she can remove or delete that user's account also.

Overall, Emma efficiently manages the makeup and skincare platform, leveraging the admin panel's features to streamline operations, provide exceptional customer service, and drive business growth.

4. Requirement Specification

4.1 Functional Requirements

User	FR No	Requirement	Description
C	FR 1	Import Products	<ul style="list-style-type: none"> • Owner will import authentic makeup items • The admin can also update the number of products, description of the products
	FR 2	Client Registration/ sign in	<ul style="list-style-type: none"> • The client must have to register or sign in to use the website.
	FR 3	Products Search	<ul style="list-style-type: none"> • Customer can search products based on categories

U S T O M E R	FR 4	Products Details	<ul style="list-style-type: none"> User will be able to see products image, origin, ingredients, price, uses, reviews
	FR 5	Products Purchase	<ul style="list-style-type: none"> Customers will be able to add items to their shopping cart Also, they will be able to update the quantity or delete the product from cart and proceed to complete the purchase
	FR 6	Chat with Admin	<ul style="list-style-type: none"> The customer will be able to chat with moderators for the delivery of the product.
	FR 7	Product Recommendations by Dermatologists	<ul style="list-style-type: none"> The customer can have a real-time chat with the specialists. Also, they can attend a query test. Based on that result, the dermatologist will recommend skin care products.
	FR 8	Payment Integration	<ul style="list-style-type: none"> The customer will be able to purchase products by Bkash, Nagad.
	FR 9	Track Payment Status	<ul style="list-style-type: none"> Customer can see order details also payment status such that is pending or delivered.
A D M I N	FR 10	Admin Registration/sign in	<ul style="list-style-type: none"> The admin must have to register or sign in to use the website.
	FR 11	Dashboard	<ul style="list-style-type: none"> Admin can see which order is completed or pending or can update that.
	FR 12	Update User Account	<ul style="list-style-type: none"> Admin can delete user from the website
	FR 13	Add product	<ul style="list-style-type: none"> Admin can add product They can update product information.

4.2. Non-functional Requirements

NFR No.	Requirement	Description
NFR 1	Performance Requirements	<ul style="list-style-type: none"> The system should handle the user request efficiently and accurately in the website. It should respond to fast actions like product searches, adding to the shopping cart, fast consultation, and suggesting related items. The clients could give feedback with minimal downtime.
NFR 2	Safety Requirements	<ul style="list-style-type: none"> The consultants should be professional and verified to avoid further problems. The users' information backup system should be automated to avoid data loss.

NFR 3	Security Requirements	<ul style="list-style-type: none"> The clients' and consultants' personal data should be stored in our database securely and transmitted securely using encryption protocols. The website be optimized that will take less space with no virus attack on the device.
NFR 4	Usability	<ul style="list-style-type: none"> The website is user friendly.

4.3. Software Requirement

1. Visual Studio
2. XAMPP

5. Diagram

5.1 Use case Diagram

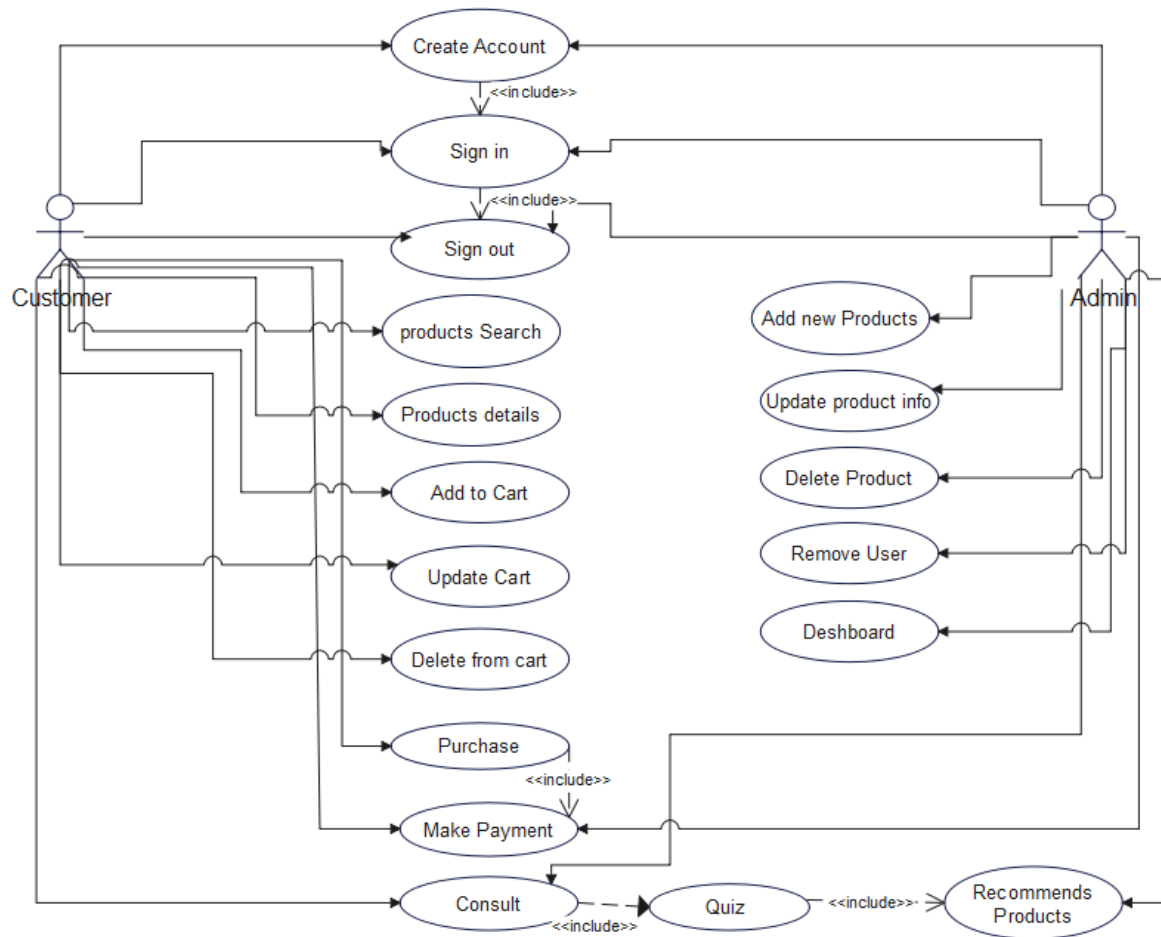


Fig: Use Case Diagram of "Blissful Essentials"

5.2 ER Diagram

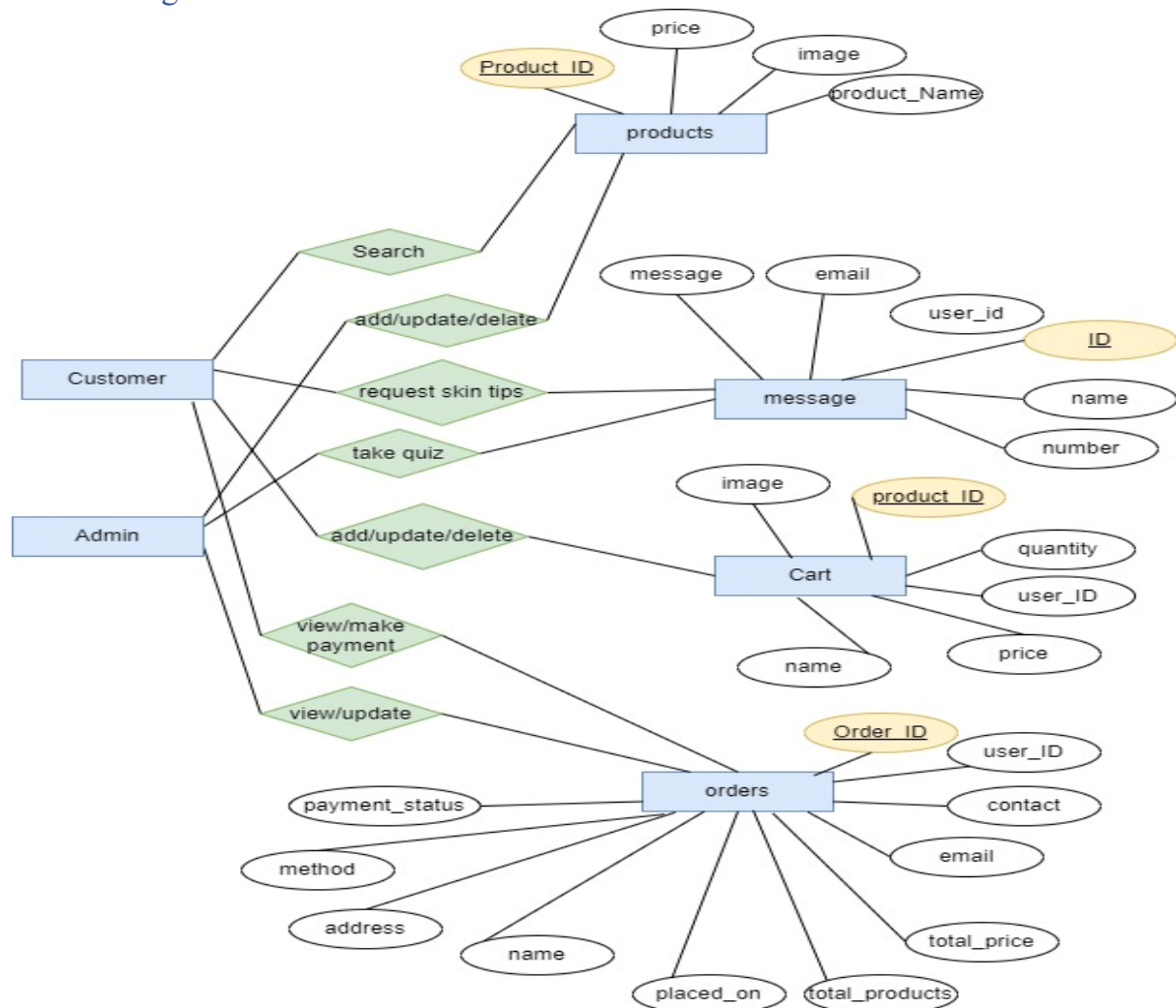


Fig: ER Diagram of "Blissful Essentials"

6. Technologies

6.1 Front End

- **HTML:** HTML is the standard markup language used to create the structure of webpages. It consists of a series of elements or tags that define the different parts of a webpage, such as headings, paragraphs, images, links, and more. HTML provides the basic structure and content of a webpage, forming the building blocks upon which CSS and JavaScript can act.
- **CSS:** CSS is used to style and format the visual presentation of HTML elements on a webpage. With CSS, developers can control the layout, colours, fonts, spacing, and other design aspects of a webpage. By separating the content (HTML) from the presentation (CSS), developers can create more visually appealing and responsive websites.
- **JavaScript:** JavaScript is a high-level programming language used to make webpages interactive and dynamic. It enables developers to add behaviours, interactivity, and functionality to webpages. JavaScript can manipulate HTML and CSS, handle user interactions, perform calculations, validate forms, create animations, and interact with web servers asynchronously (via AJAX).

6.2 Backend

- **PHP:** It's known for its simplicity and flexibility, allowing developers to embed PHP code within HTML to create dynamic web pages. PHP executes on the server before sending the resulting HTML to the client's browser, making it suitable for generating dynamic content, interacting with databases, and handling forms and cookies.
- **MySQL:** It provides a reliable, scalable, and high-performance platform for storing and managing structured data. MySQL follows the relational database model, organizing data into tables with rows and columns and supporting SQL for querying and manipulating data. It offers features such as transactions, indexing, replication, and security mechanisms to ensure data integrity and confidentiality.

7. Database Implementation

Database connection

Shop_db database was connected with our system where no password is needed to access the database (figure 1)

```
config.php
1 <?php
2
3 $conn = mysqli_connect('localhost','root','','shop_db') or die('connection failed');//server connected, username, password, database name
4
5 >
```

Figure 1: Database connection with the server

Database

This is the database (shop_db) for my project to store data. Here 5 tables are included such as cart, message, order, products and user.

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> cart	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> message	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> orders	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> products	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> users	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	16.0 KiB	-
5 tables	Sum	10	InnoDB	utf8mb4_general_ci	80.0 KiB	0 B

Figure 2: Shob_db database

User Table

In this table (figure 3) when user will register in the website, user's information will be stored here. Here id is the primary key for user and other attributes are name, email, password which corresponds to the other attribute user_type (admin or customer). Figure 4 is the outcome when user registered here.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/> 1	id	int(100)			No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/> 2	name	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/> 3	email	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/> 4	password	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/> 5	user_type	varchar(20)	utf8mb4_general_ci		No	None			Change Drop More

Figure 3: Structure of User Table













<div><div>←T→</div><div></div></div>				id	name	email	password	user_type
<input type="checkbox"/>	 Edit	 Copy	 Delete	1	Farjahan Akter Bobby	farjahan2002@gmail.com	26588e932c7ccfa1df309280702fe1b5	user
<input type="checkbox"/>	 Edit	 Copy	 Delete	2	Farjahan Akter	farjahanakboby@gmail.com	e10adc3949ba59abbe56e057f20f883e	admin
<input type="checkbox"/>	 Edit	 Copy	 Delete	4	Farjahan	farjahan@gmail.com	202cb962ac59075b964b07152d234b70	admin
<input type="checkbox"/>	 Edit	 Copy	 Delete	5	Boby	boby@gmail.com	202cb962ac59075b964b07152d234b70	user

Figure 4: Outcome when user registered as a customer or admin

Products Table

In this table (figure 5) when **admin** will add, update or remove any product in the website, products's information will be stored here. Here id (product id) is the primary key for product and other attributes are name, price, image. Figure 6 is the outcome when admin manipulated any product in the website.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	id	int(100)		No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2	name	varchar(100)	utf8mb4_general_ci	No	None			Change Drop More
<input type="checkbox"/>	3	price	int(100)		No	None			Change Drop More
<input type="checkbox"/>	4	image	varchar(100)	utf8mb4_general_ci	No	None			Change Drop More

Figure 5: Structure of Products Table










				id	name	price	image
<input type="checkbox"/>	 Edit	 Copy	 Delete	4	Shower Gel -250ml	2500	shower_gel.png
<input type="checkbox"/>	 Edit	 Copy	 Delete	5	Essence, Lipstick (shade- brave13)	1600	lipstick.png
<input type="checkbox"/>	 Edit	 Copy	 Delete	7	Nailpolish-shade4	1200	nailpolish.png

Figure 6: Outcome when admin manipulated products in the server

Cart Table

In this table (figure 7) when **consumer** will add, update or remove any product in the website, products's information will be stored here. Here id (product id) is the primary key for product and other attributes are name, price, quantity, image. Another attribute is user_id, when consumer will manipulate any product that will be stored against that specific user.

Figure 8 is the outcome when consumer manipulated any product in the website.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	id	int(100)		No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2	user_id	int(100)		No	None			Change Drop More
<input type="checkbox"/>	3	name	varchar(100)	utf8mb4_general_ci	No	None			Change Drop More
<input type="checkbox"/>	4	price	int(100)		No	None			Change Drop More
<input type="checkbox"/>	5	quantity	int(100)		No	None			Change Drop More
<input type="checkbox"/>	6	image	varchar(100)	utf8mb4_general_ci	No	None			Change Drop More

Figure 7: Structure of Cart Table

					id	user_id	name	price	quantity	image
<input type="checkbox"/>					16	1	Shower Gel -250ml	2500	1	shower_gel.png
<input type="checkbox"/>					17	1	Essence, Lipstick (shade- brave13)	1600	2	lipstick.png

Figure 8: Outcome when consumer manipulated products in the server

Orders Table

When the consumer will order any product, related information will be stored in here (figure 9). And the consumer can track their orders or payment status. Figure 10 is the outcome when consumer ordered product in the website.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 id	int(100)			No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2 user_id	int(100)			No	None			Change Drop More
<input type="checkbox"/>	3 name	varchar(100)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	4 number	varchar(12)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	5 email	varchar(50)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	6 method	varchar(50)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	7 address	varchar(500)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	8 total_products	varchar(1000)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	9 total_price	int(100)			No	None			Change Drop More
<input type="checkbox"/>	10 placed_on	varchar(50)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	11 payment_status	varchar(20)	utf8mb4_general_ci		No	pending			Change Drop More

Figure 9: Structure of Orders Table

					id	user_id	name	number	email	method	address	total_products	total_price	placed_on	payment_status
<input type="checkbox"/>					2	1	Farjahan Akter Bobby	01810113680	farjahan2002@gmail.com	cash on delivery	flat no. 1, , hgc, drh - 5155	, Nature (5)	750	02-May-2024	pending
<input type="checkbox"/>					3	3	yg	25455	hgfgg@gmail.com	bKash	flat no. 4, nhjvh, kug - 4	, Essence, Lipstick (shade- brave13) (2) , Shower ...	5700	02-May-2024	completed
<input type="checkbox"/>					4	5	Boby	12164979	hvjhg@gmail.com	cash on delivery	flat no. 4, wqwr, erfewr - 24	, Essence, Lipstick (shade- brave13) (1)	1600	03-May-2024	completed

Figure 10: Outcome when consumer ordered products in the server

Messages Table

When the consumer need consultation for skin care products or want to take part in quizzes, they can communicate with admin via this section. For that some information is needed. That will be stored in this table. (figure 11). Figure 12 is the outcome when consumer sent message to admin

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	id			No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2	user_id			No	None			Change Drop More
<input type="checkbox"/>	3	name	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	4	email	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	5	number	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	6	message	utf8mb4_general_ci		No	None			Change Drop More

Figure 11: Structure of Message Table

	id	user_id	name	email	number	message
<input type="checkbox"/> Edit Copy Delete	4	1	Farjahan Bobby	farjahan@gmail.com	01810113658	Suggest some sunscreen for oily skin that will n...

Figure 12: Outcome when consumer sent message to admin

8. Code Implementation

The zip file of the code is uploaded in the GitHub. The GitHub link is below here

- https://github.com/farjahanboby/Blissful_Essentials

9. Accomplishment

User	Proposed Feature	Actually Implemented	
		Yes	No
A D M I N	Registration, log in, Log out	✓	
	Add, update, delete product	✓	
	Remove users, read and delete message	✓	
	Update payment status	✓	
C O N S U M E R	Add to cart, update quantity, delete from cart	✓	
	Search product	✓	
	Place order (cash on, bKash, Nagad)	✓	
	Track order or order details	✓	
	Take skin tips/ quizzes (consult)	✓	

Contribution

This is a single project. This project was built from scratch but as I have done it all alone, so for few features I had to use predefined template to complete it as I have planned.