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Faculty of Science and Technology

Dept. of Information and Communication Technology (ICT)

Project Report

Topic: “ Khuda Lagse - Online Food Delivery Service ”

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Project Report On:

**“ Khuda Lagse - Online Food
Delivery Service ”**

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➤ **Project Overview:**

"**Khuda Lagse**" is an online platform aimed at connecting customers with local restaurants and food vendors, providing them with a convenient and user-friendly way to order food and get it delivered to their doorsteps. This application is built using Java Swing/FX for the graphical user interface and MySQL for managing the back-end database.



➤ **Project Objectives:**

The main objectives of the "**Khuda Lagse**" project are:

- To create an intuitive and easy-to-use interface for customers to browse menus, place orders, and make payments.
- To provide restaurant vendors with a platform to showcase their menu, receive orders, and manage transactions.
- To ensure secure and efficient handling of customer data and transaction details.
- To facilitate updates on order status for both customers and vendors.

➤ **System Architecture:**

The "**Khuda Lagse**" application follows a client-server architecture:

- Client Side (Java Swing/FX): This is the user interface through which customers interact with the service. It includes features like user registration, login, menu browsing and order placement.
- Server Side (MySQL Database): This stores all the necessary data including user information, restaurant details, menu items, and order status.

➤ **Technologies Used:**

- Java Swing/FX: Used for creating the graphical user interface of the application.
- MySQL: Used for storing and managing all the data related to users, restaurants, orders, and transactions.
- Java JDBC: Used for connecting the Java application with the MySQL database.

➤ **Functionalities and Features:**

- Customer Side: User Registration and Login: Allows new users to register and existing users to log in.
- Browse Menus: Customers can browse through various restaurant menus and select items to add to their cart.
- Place Orders: Customers can place orders, view the total cost, and make payment.



The login form has a red background. At the top, it says "KHUDA LAGSE" with a small tractor icon. Below that is the title "Login". There are two input fields: "Email" and "Password". Below the password field are three buttons: "Login", "Clear", and "Exit". At the bottom, there are two more buttons: "Signup" and "Forgot Password?".



The signup form has a yellow background. On the left, there is a cartoon illustration of a delivery person with a beard, wearing a yellow cap and a green jacket, riding a yellow scooter with a yellow delivery box. To the right of the illustration is the title "Signup". There are several input fields: "Name", "Email", "Phone Number", "Address", "Password", "Security Question", and "Answer". At the bottom, there are three buttons: "Signup", "Login", and "Forgot Password?".



The "Forgot Password?" form has a dark blue background. It contains four input fields: "Email", "Security Question", "Answer", and "New Password". To the right of the "Email" field is a "Search" button. At the bottom, there are five buttons: "Update", "Clear", "Exit", "Signup", and "Login".

➤ **Key Features:**

- **Add New Product:**

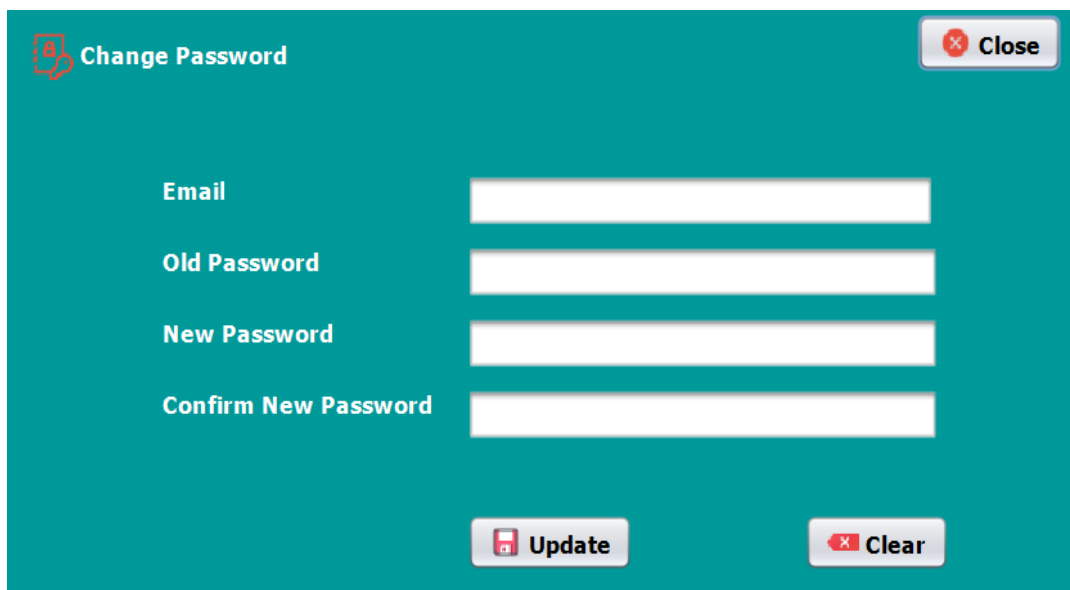
Within the "Add New Product" section, the administrator has the capability to include fresh products, specifying both the product name and its corresponding price within a designated category.



The screenshot shows a 'New Product' form with a dark, food-themed background. The form includes a title 'New Product' with a close button, and three input fields: 'Name' (containing 'Thai Soup'), 'Category' (a dropdown menu with 'Soup' selected), and 'Price' (containing '3000'). There are 'Save' and 'Clear' buttons at the bottom. The background features sketches of a burger, pizza, and other food items.

- **Change Password:**

Both the user and the administrator have the option to reset their passwords by answering their respective security questions.



The screenshot shows a 'Change Password' form with a teal background. The form includes a title 'Change Password' with a close button, and four input fields: 'Email', 'Old Password', 'New Password', and 'Confirm New Password'. There are 'Update' and 'Clear' buttons at the bottom.

- Manage Category:

In the "Manage Category" section, the administrator can introduce new food categories into the category table, and subsequently, these categories are stored in the database for future use.

Manage Category Close

Add new Category

Save Clear

View Category

ID	Category
1	Soup

- Total Revenue:

Under Total Revenue, the admin can see all the money generated from the orders placed by the users including the total list of orders stage.

Total Revenue

ID	Name	Phone Number	Email	Date	Total
1	omi	12345678910	admin@gmail.com	29-10-2023	9000
2	zawad	12345678910	admin@gmail.com	29-10-2023	15000

- Place Order:

In the "Place Order" section, users can select food items to place an order. Each time they click on a food item, an image of the selected food will appear. Users have the flexibility to adjust the quantity of the selected items. However, the final bill will not be generated unless they provide their name and phone number. Once these details are provided, a PDF of the bill will be generated at a later stage.

Place Order

Close

Bill ID: 3

Category

Soup

Name

Price

Customer Details

Search

Name

Quantity

Price

Total

omi

1

Phone Number

12345678910

Name

Thai

Email

omi@gmail.com

Clear

Add to Cart

Name	Price	Quantity	Total
Thai	3000	3	9000

Grand Total: Tk. 9000

Generate Bill & Print

- Verify Users:

In the Verify Users section, admins can verify new user accounts to allow access to the application's features, and disable existing user accounts.

Verify Users

Close

Search

ID	Name	Email	Phone Number	Address	Security Question	Status
----	------	-------	--------------	---------	-------------------	--------

- View Bills Order History:

In the View Bills Order History section, admins can view a table of all orders placed by users, including the user's name, email address, total amount, phone number, and date. Admins can also filter the table by date or search by user name. Additionally, admins can sort the table in ascending or descending order by any column.

View Bills & Order History						
Filter By Date		29-10-2023		Change Order By ID		ASC
ID	Name	Phone Number	Email	Date	Total	Created By
1	omi	12345678910	admin@gmail.com	29-10-2023	9000	admin@gmail.com
2	zawad	12345678910	admin@gmail.com	29-10-2023	15000	admin@gmail.com

- View Order History:

Under View, Edit, and Delete Products, admins can view a list of all products in their respective categories, including the product name, price, and product ID. Admins can also edit the product name, price, and category.

Under View Order History, users can view a list of all orders they have placed in the app, including the order name, total amount, order ID, phone number, email, order date, total payment, and created by. Users can also click on an order to view a PDF of the bill.

Order History						
ID	Name	Phone Number	Email	Date	Total	Created by

View, Edit & Delete Product			
ID	00		
Name	<input type="text"/>		
Category	<input type="text"/>		
Price	<input type="text"/>		
<input type="button" value="Update"/>		<input type="button" value="Delete"/>	
		<input type="button" value="Clear"/>	

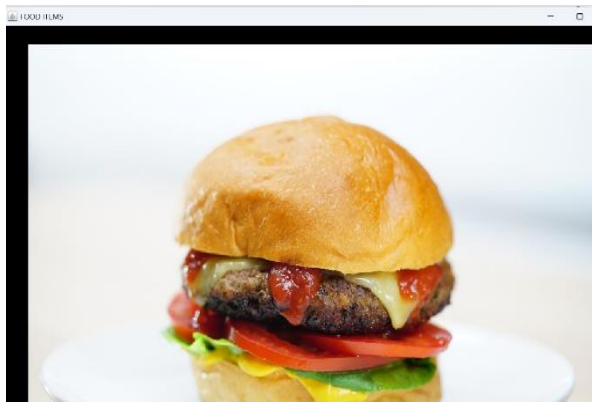
ID	Name	Category	Price
1	Thai	Soup	3000

Khuda Lagse (Online food delivery service)			
Bill Id: 1			
Customer Name: omi			
Total Paid: 9000			
Date: Sun Oct 29 16:50:28 SGT 2023			
Name	Price	Quantity	Total
Thai	3000	3	9000

Thank you for choosing Khuda Lagse! Please visit again to use our services.

- Slide Show of the Food Items:

The food items will be displayed in a slideshow that slowly shuffles. Users can close the slideshow at any time, or click on the button to display it again.



➤ **Restaurant Vendor/Admin Side:**

- Manage Menu: Allows vendors to add, remove, or update menu items.
- Receive Orders: Vendors can view incoming orders, update order status, and manage transactions.
- View Transaction History: Vendors can view past transactions and order histories.



➤ **Database Design:**

The MySQL database includes the following tables:

- Users: Stores customer and vendor details.
- Restaurants: Stores restaurant details.
- Menu Items: Stores menu details for each restaurant.
- Orders: Stores details of customer orders.
- Transactions: Stores transaction details for each order.

```
mysql> show databases;
+-----+
| Database |
+-----+
| foodservice |
| information_schema |
| mysql |
| performance_schema |
| sys |
| testdb |
+-----+

Database changed
mysql> show tables;
+-----+
| Tables_in_foodservice |
+-----+
| bill |
| category |
| product |
| user |
+-----+
4 rows in set (0.02 sec)
```

```
mysql> select * from category;
+----+-----+
| id | name |
+----+-----+
| 1  | Soup |
+----+-----+
1 row in set (0.00 sec)

mysql> select * from products;
ERROR 1146 (42S02): Table 'foodservice
mysql> select * from product;
+----+-----+-----+-----+
| id | name | category | price |
+----+-----+-----+-----+
| 1  | Thai | Soup      | 3000  |
+----+-----+-----+-----+
1 row in set (0.00 sec)
```

➤ **Challenges and Solutions:**

- Security: Ensuring secure handling of user data and transaction details. This was mitigated by implementing encryption and secure connection protocols.
- Real-Time Updates: Ensuring that order status is updated in real-time for both customers and vendors. This was achieved using event-driven programming and database triggers.

➤ **Future Enhancements:**

- Mobile Application: Developing a mobile app version of the service.
- Enhanced User Interface: Further improvements to the user interface for a more seamless experience.
- Expansion of Services: Expanding the service to cover more areas and include more restaurant options.

➤ **Conclusion:**

"Khuda Lagse" aims to provide a seamless and efficient online food ordering experience, connecting customers with a variety of local restaurants. By Java Swing/FX and MySQL, the application offers a robust and user-friendly platform for food delivery services. The system is well-equipped to handle customer orders and assist restaurant owners in managing their business operations. With the ever-increasing demand for such services, this project holds significant potential for expansion and growth.

