CHAPTER 1

INTRODUCTION

ONLINE CAKE ORDERING SYSTEM is a system that allows users to check for various cakes available at the online store and purchase online. The project consists of list of Cakes displayed in various categories. The user may browse through these items. If the user likes a product he may add it to his shopping cart. He may even pay through a credit card or cash on delivery. Thus the online Cake shopping project brings an entire cake shop online and makes it easy for both buyer and seller.

The idea is to provide each and every people out there to have a fun party at different occasions. The customers can order instantaneously across anywhere around the area, anywhere they want.

The online cake ordering system will be computerized so that it has less paper work to do and it will save both the money and the time. It will also reveal bakery to the outside environment. So everyone will have the win-win situation.

Cake ordering system project is managing software for bakery's to handle customer's orders bill payment details,report generation and sales details.It is a management software used in bakery's for organizing customers orders, sales, payment details, report generation..etc

It's activity is based on ordering and selling the cake for each customer. Each customer will be given unique order number.

It will be very difficult to manually calculate the daily sales taken place if the calculation is very huge. This application is designed to reduce the manual work involved in calculating the sales activity. The sales activity can be got in just one mouse click through the use of this application. This will be one of the applications that will help the owners of the cake shop to manage their sales activity with great ease. The sales servicing activity will take place in a quicker manner through this application.

The Application has 3 types of roles:

1. Owner (Admin)
2. Customer
3. Worker

Owner has to login so that other individuals are not given access to the application. The system administrator maintains the database of the system, enters the details of all salespersons, customers and workers

1.1 OVERVIEW:-

This application is based on the ordering and selling the cake for each customer. Each customer can have a unique id through this application. The flavor of the cake can also be selected through this application.

Users of the cake ordering system will interact with the application through a simple signup form. Each category of food has its own form associated with it which presents a drop down menu for choosing which specific item from the category should be added to the order, and a series of check boxes and radio buttons for selecting which options are to be included. Adding an item to the order is accomplished by a single button click. Users select which category of food they would like to order, and therefore which form should be displayed, by navigating a menu bar, an approach which should be familiar to most users.

Entering delivery and payment deals is done in a similar manner. The user is presented with two options firstly the user can pay the amount through online cash which requires entering the user card details and secondly the user may choose cash on delivery in which cash is collected at the time of delivery .

On successful ordering the order is obtained in admin database in which the admin can set a perticuler employee to deliver the product to customer.on delivering, the employee clicks on deliver button.so that the delivery is complete.and the details are updated in database.

The application is developed using following main parts:

1. Client side: This part includes features to help user use the core functions of software like register,login,menu,payment making.
2. Server side: This part includes features to help admin/manger of bakery like login,adding employees,viewing orders and manging delivery process of cakes to cutomers.

1.2 OBJECTIVES:-

1. To computerize the online cake ordering system so that it has less paper work to do and it will save both the money and the time.
2. To reveal the bakery to the outside environment.
3. To provide a system which manages the sales activity in a cake shop for each day and its calculation which is very huge
4. Managing software for bakery’s to handle customer’s orders bill payment details,sales details etc,.

CHAPTER 2

LITERATURE SURVEY

When we started to do a DBMS mini project, we have taken a suggestion from many of our teachers,our seniors and friends who have a knowledge on these topics. They had given a many idea's and we were trying to search for it, we got an idea of creating a system that enables people to order cakes online from bakerys.Imagine a situation in which you are trying to buy a cake for birthday or any other thingand in your area only two to three bakerys are present and you couldn't find a best cake as of your requirements.you couldn't go far ordering a cake so you have to convince yourself to buy a cake that is available in near bakeris.

Our project helps to overcomes this type of problems.we maintain a list all the best cakes available in all the bakeries so that user can choose the best cake for his requirements. More ever we make the availability of cakes online so that users cakes will be delivered to customer's door. Benefitting both the customer and seller.

Going online is an excellent way of scaling up and spreading the customer base. Statistics show that the number of people buying online is steadily increasing and so is the volume of transactions happening online. Amazon.com web site for example, shows that it is possible to sell products online, which is considered as something that "need to touch, feel and see" before buying. The internet unable to replicate the sensory experience but it brings in lot of other benefits like ease of shopping, more choices, and safe the customers time and etc.

Besides, going online is more than scanning some pictures and putting up an online catalogue. There are various factors that involved in the successful of any online application. The ONLINE CAKE ORDERING SYSTEM is just like the other online sales application which the only different is that the products are cakes, cookies and breads. In Malaysia itself, not many cake houses have their own web site and do the online business. This is because of the trends in Malaysia itself whereby most of Malaysian still need to touch, feel and see the products before buying. Furthermore, the customers still have the doubt feelings of their purchasing deliverable, they keep arguing whether they can really get the product or not. All those perceptions can minimize the shop or business organization interest to practice the online sales application as well.

We helps a users and suppliers by acting as distributors by taking products from them and sell those to the customers who have registered to us.

It inspired us to do this project because it helps the people in ordering cakes from bakeries without going to bakeries with online booking facilities. Online cake ordering system benefits both customers and bakeries in buying and selling of bakeries.

CHAPTER 3

SOFTWARE REQUIREMENTS SPECIFICATION

It gives us the complete details of both Hardware and Software requirements needed to implement this project.

3.1 HARDWARE REQUIREMENTS:-

The following hardware requirements are needed to develop the application:

- Computer that has a 1.6 GHz or faster processor (2 GHz recommended).
- 1 GB (32-bit) or 2 GB (64-bit) RAM (add 512 MB if running in a virtual machine).
- 10 GB of available hard disk space.
- 5400 RPM Hard Disk Drive

3.2 SOFTWARE REQUIREMENTS:-

The application is developed using java as the front end which is supported by Apache server and MySQL Server as the back end for accessing and connecting the front end to the database.

JAVA is one of the most popular and powerful language. It is also used in developing applications by using the Apache server which is used in this project. It is also widely used object-oriented language that is used in this project.

SQL (Structured Query Language) is used for defining, manipulating, controlling, storing and viewing the information present in a database.
The following software are required to develop the application:

- **Front end: JAVA**
- **Back end: MYSQL**
- **Database used** : MS SQL Server Database.
- **Database file used** : MS SQL Server Database file (.mdf)
- **XAMPP CONTROL PANNEL V3.2.2**
- **Operating system** : Windows 10 (x64),

CHAPTER 4

DESIGN

4.1 DESCRIPTION OF THE RELATIONS (TABLES)

1 customer

Creation: Nov 30, 2019 at 03:06 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
customer_id	int(255)		No		auto_increment			
first_name	varchar(255)		No					
last_name	varchar(255)		No					
email_id	varchar(255)		No					
password	varchar(255)		No					
phone_no	varchar(10)		No					
state	varchar(255)		No					
city	varchar(255)		No					
landmark	varchar(255)		No					
pincode	int(6)		No					

2 menu

Creation: Nov 30, 2019 at 03:06 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
menu_id	int(255)		No		auto_increment			
menu_name	varchar(255)		No					
price	int(20)		No					

3 orders

Creation: Nov 30, 2019 at 03:06 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
order_id	int(255)		No		auto_increment			
customer_id	int(255)		No			-> customer.customer_id ON UPDATE RESTRICT ON DELETE RESTRICT		
menu_id	int(255)		No			-> menu.menu_id ON UPDATE RESTRICT ON DELETE RESTRICT		
quantity	int(255)		No	1				
order_status	enum('ADDED_TO_CART', 'CONFIRMED', 'PAYMENT_CONFIRMED', 'DELIVERED')		Yes	NULL				
time_stamp	timestamp		No	current_timestamp()	on update current_timestamp()			

4 payment

Creation: Nov 30, 2019 at 03:06 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
id	int(255)		No		auto_increment			
order_id	int(255)		No			-> orders.order_id ON UPDATE RESTRICT ON DELETE RESTRICT		
payment_type	enum('CASH_ON_DELIVERY', 'ONLINE_PAYMENT')		No	CASH_ON_DELIVERY				
payment_status	enum('NOT_CONFIRMED', 'CONFIRMED')		No	NOT_CONFIRMED				
time_stamp	timestamp		No	current_timestamp()	on update current_timestamp()			

5 payment_details

Creation: Nov 30, 2019 at 03:06 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
payment_id	int(255)		No		auto_increment			
customer_id	int(255)		No			-> customer.customer_id ON UPDATE RESTRICT ON DELETE RESTRICT		
card_number	varchar(16)		No					
card_holder_name	varchar(255)		No					
cvv	int(3)		No					
exp_month	int(2)		No					
exp_year	int(4)		No					
time_stamp	timestamp		No	current_timestamp()	on update current_timestamp()			

6 restaurant

Creation: Nov 30, 2019 at 03:06 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
restaurant_id	int(255)		No		auto_increment			
password	varchar(255)		No					
first_name	varchar(255)		No					
last_name	varchar(255)		No					
designation	enum('EMPLOYEE', 'ADMIN')		No	EMPLOYEE				

TRIGGER

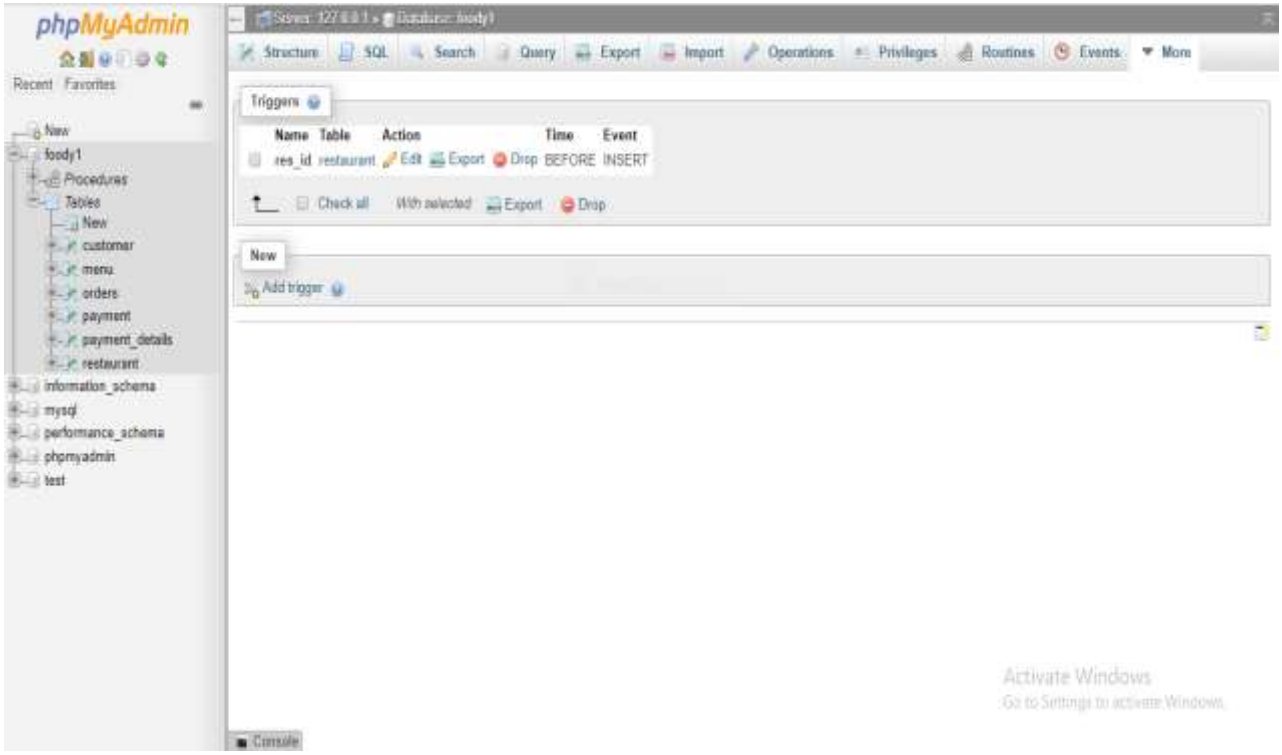

Fig i. Trigger

A trigger is a special type of stored procedure that automatically runs when a event occurs in the database event. This occurs when user tries to modify data through a DML (Insert, Delete, Update) statements. Triggers help the database designer ensure certain actions, such as maintaining an audit file, are completed regardless of which program or user makes changes to the data.

BEFORE triggers run the trigger action before the triggering statement is run.AFTER triggers run the trigger action after the triggering statement is run.The above figure shows the trigger used in this project. The triggers can occur after or instead a dml action. Triggers are associated with the database dml actions INSERT, UPDATE, and DELETE.

Triggers are defined to run when these actions are executed on a specific table. Triggers use two special database objects, inserted and deleted, to access rows affected by the database actions. Within the scope of a trigger the inserted and deleted objects have the same columns as the trigger's table.The inserted table contains all the new values; whereas, the deleted table contains old values.

4.2 Schema Diagram

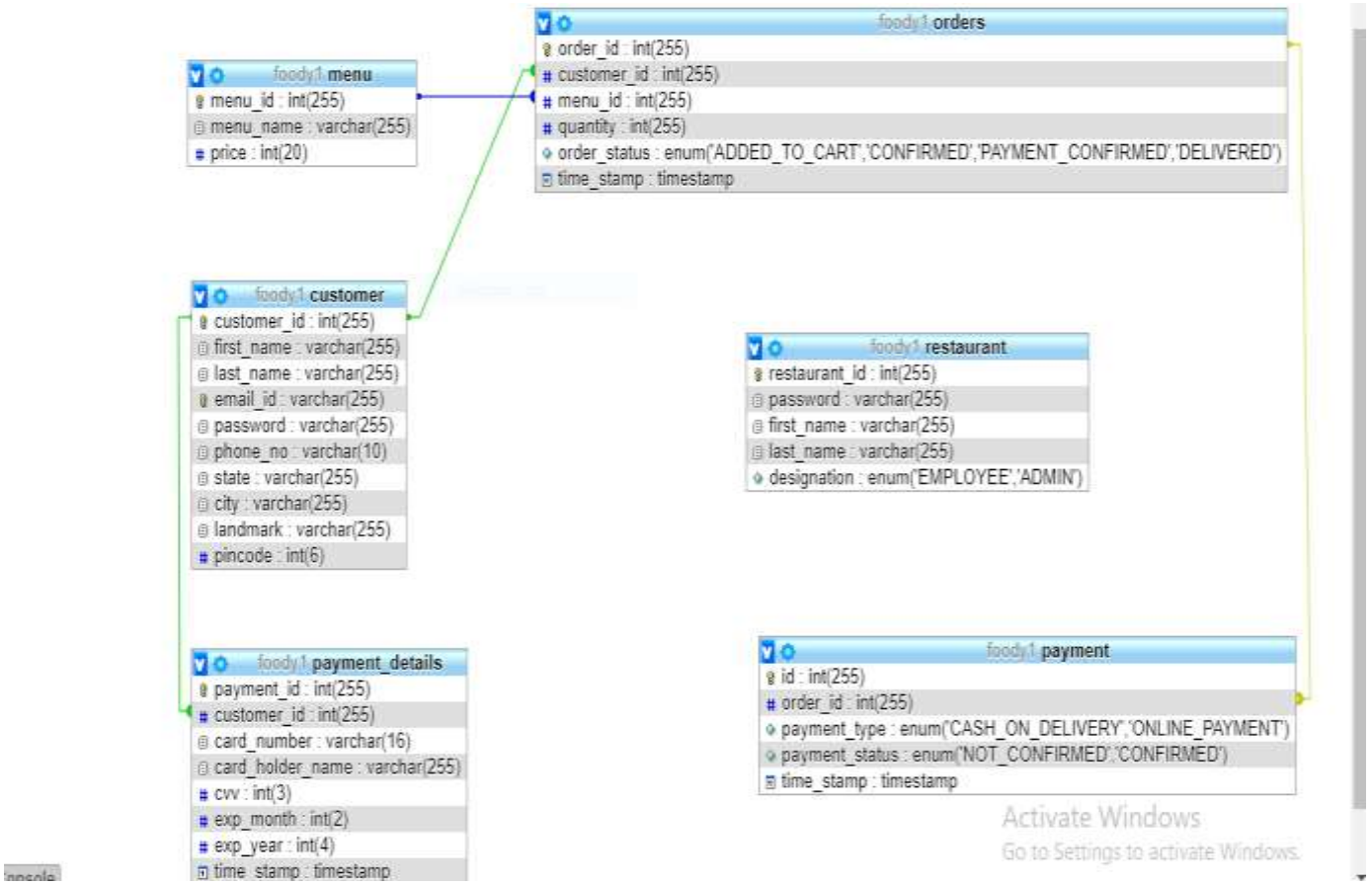

Fig ii. Schema Diagram

A schema contains schema objects like table, foreign key, primary key, views, columns, data types, stored procedure, etc. A database schema can be represented by using the visual diagram. That diagram shows the database objects and relationship with each other.

In database terms, a *schema* is the organisation and structure of a database. Both *schemas* and *schemata* can be used as plural forms.A schema contains schema objects, which could be tables, columns, data types, views, stored procedures, relationships, primary keys, foreign keys,etc.A database schema can be represented in a visual diagram, which shows the database objects and their relationship with each other.

The primary keys in menu is menu_id,In orders is order_id_id,In customer table is customer_id,In restaurant table is restaurant_id,in payment_details is payment_id.

Menu_id in orders table is a foreign key which references to menu_id in menu table.customer_id in orders is a foreign key that references to customer_id in curtomer table.customer_id in payment details is a foreign key that referenes to cutomer_id in customer details.

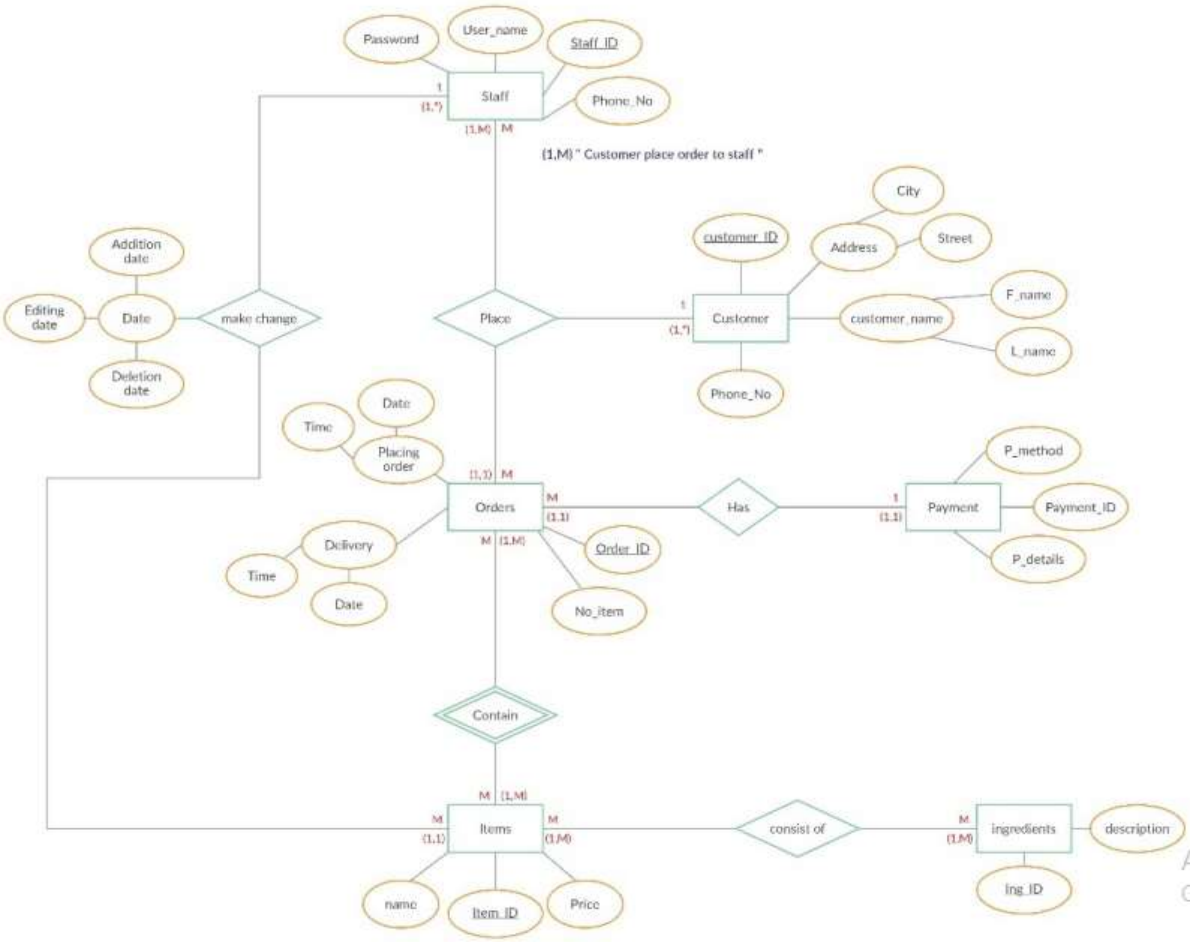

Fig iii. ER DIAGRAM

4.3 ENTIRY RELATIONAL DIAGRAM:-

Entity Relationship (ER) model is one which popular high level conceptual data models and it describes data as entities, relationships, and attributes.

Representing diagrammatic notation associated with the ER model known as Entity Relationship (ER) diagram.

The ER diagram for “Copra Trader’s Management System” shown in the fig 3, there are 5 tables, namely Owner, Supplier, Customer, Workers, Orders. All 5 entities are strong entities, which are represented using rectangular box and attributes represented by using ovals. Relationship between two entities using rhombus.

All entities holds primary key i.e. Owner_ id for Owner, cust_ id for Customer, Sup_ id for Supplier, Worker_ id for Workers and ord_ id for Orders.

Owner_ id from Owner entity is the foreign key for the entities Customers, Suppliers, Workers. cust_ id from Customer entity is the foreign key for the Orders entities. Owner entity maintains Customer, Supplier, workers entities.

CHAPTER 5

IMPLEMENTATION

5.1 Implementation with Screenshots

Fig 1. Home Page

This is the starting page of this project.This is the client side application.It consist of two things **SignUp and Login.**when you open this you see the page as above. It asks for registration Into this software .if you are a new user you have to signup to this software.Signup will ask for several details that is shown next figures.If you already have an Account you have to sign up to this software that is shown in next figures .

The window is created using javaFX application.It is fxml file that is created in eclipse. javaFX is a set of graphics and media packages that enables developers to design,create,test,debud,and deploy rich client applications that operate consistently across diverse platform.

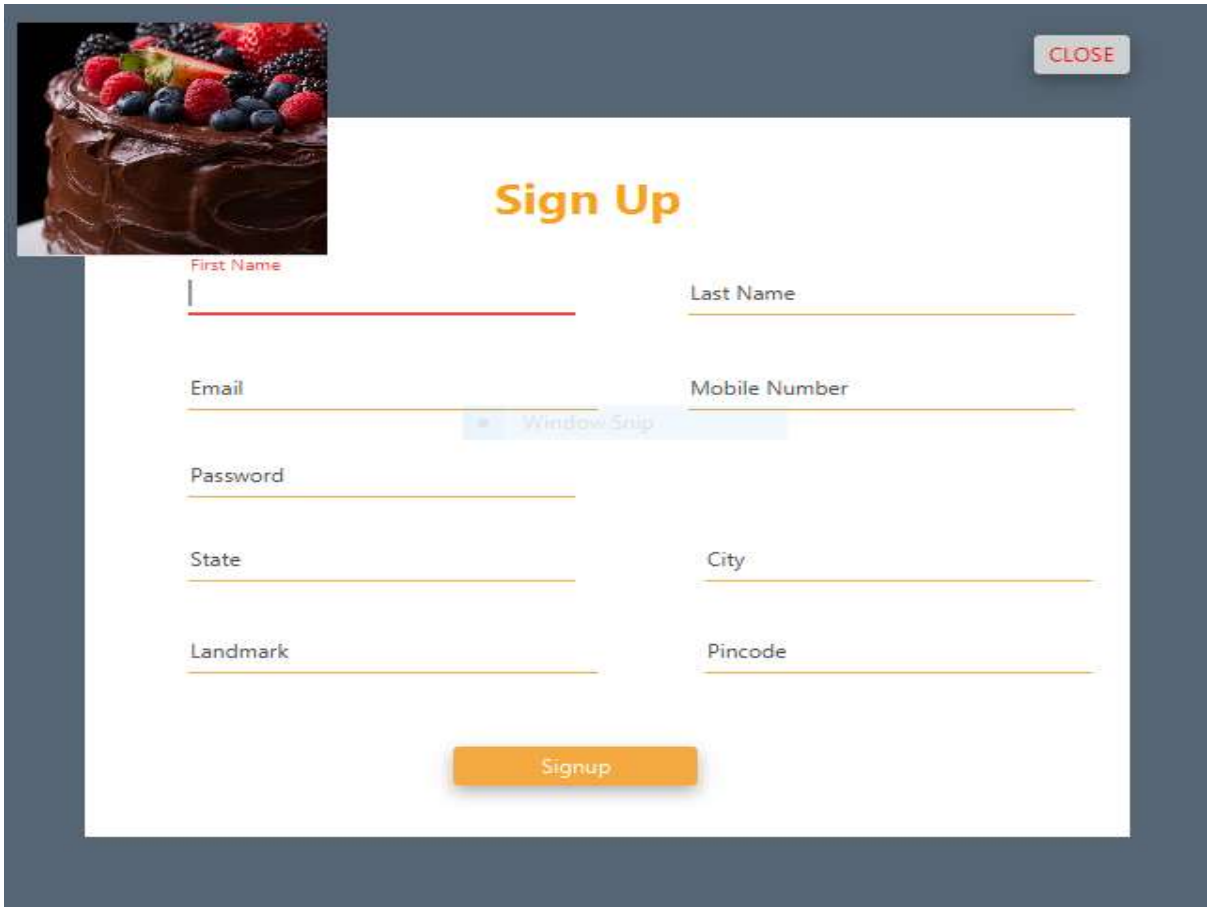

Fig 2. signup Page

Signup pages registers the customer with us.It will as for details of customer like **name,email,mobile number,password,state,city,landmark,pincode.**

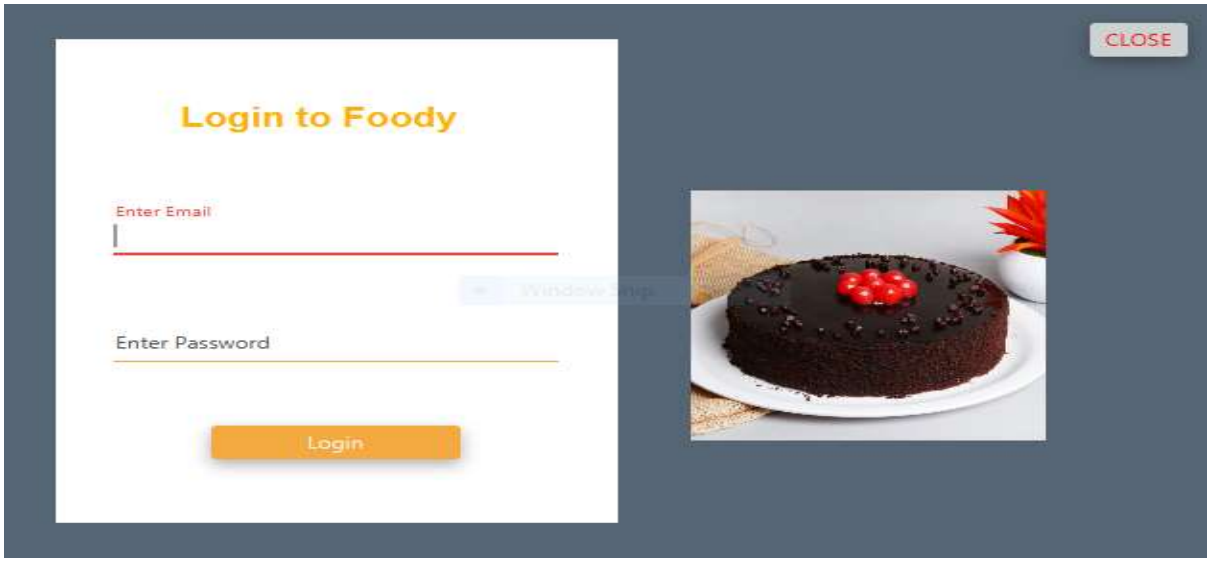

Fig 3. Login Page

Customer registered with us can login to our software .The registered customer have to enter email and password to login.On successful login user can view menu of cakes.

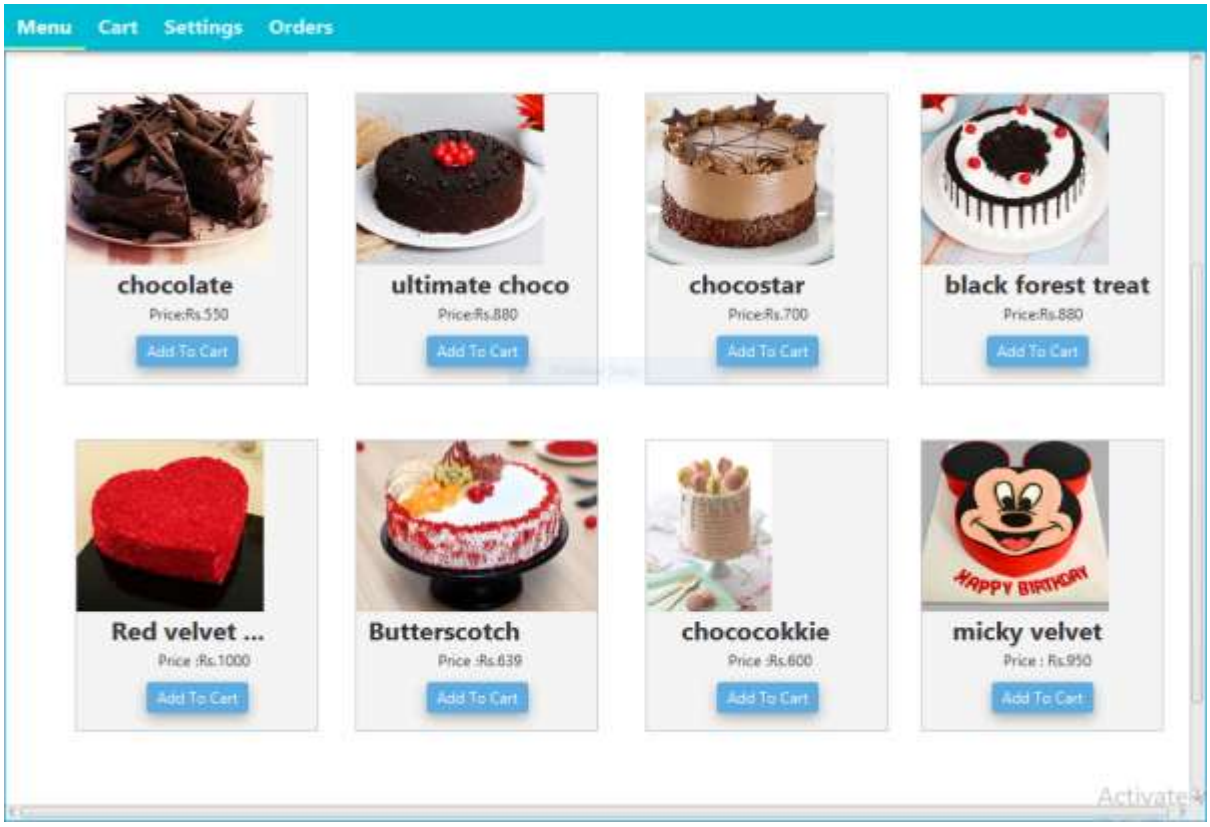

Fig 4. Menu Page

The registered customer can choose the type of cake.The menu consists of cake name ,price of cake,and a button to add the cake to cart.

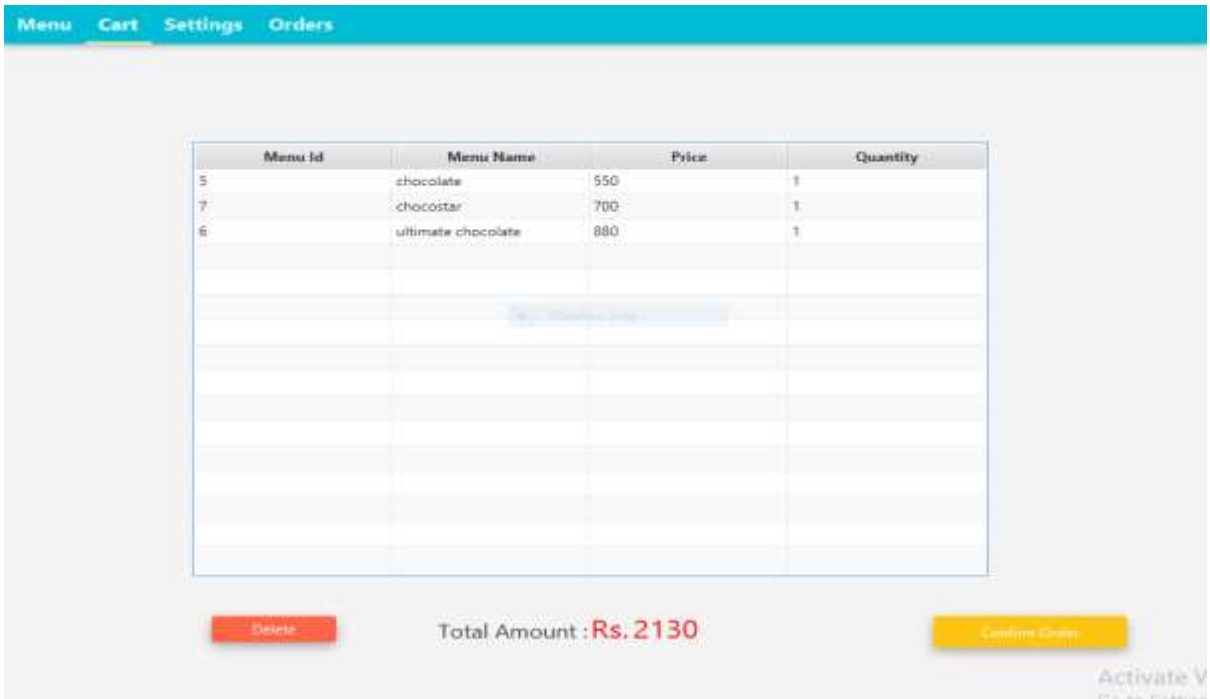

Fig 5. Cart Page

The cart page consist of all the cakes ordered by the user.The cart details like name of cake, menu id, price of cake and quantity of cakes is displayed.

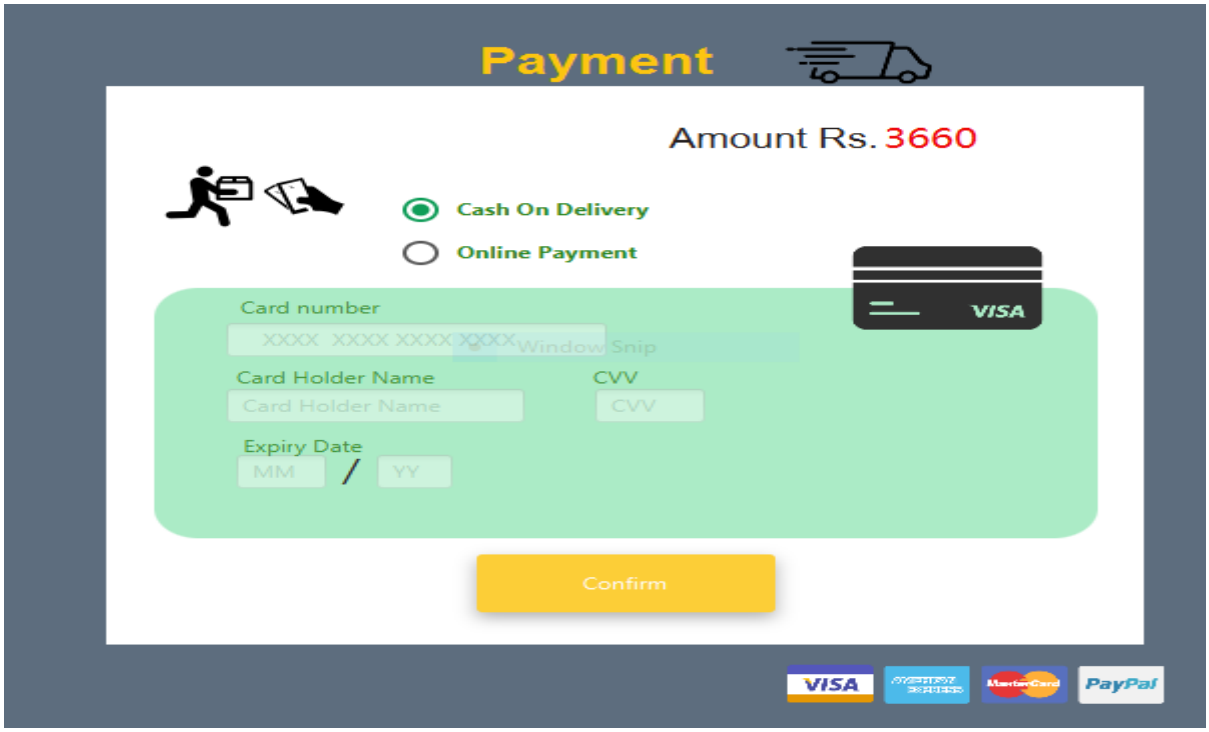

Fig 6. Payment Page

The payment page consist of type of payment.The payment use is online payment and cash on delivery.If the customer chooses cash on delivery the cart is accepted and delivery process starts at the time of delivery cash will be taken from user.If online payment the customer have to enter the card details.all types of cards are accepted.

Fig 7. Settings Page

In case if user wants to change his password ,this software provides user with facility of changing paaword.The user can update hism password by entering oldpasswod and new password.The user may also update his address in case if he changed the address.The user can simply enter the new address and click on update button so that address of user logged in is updated in database.

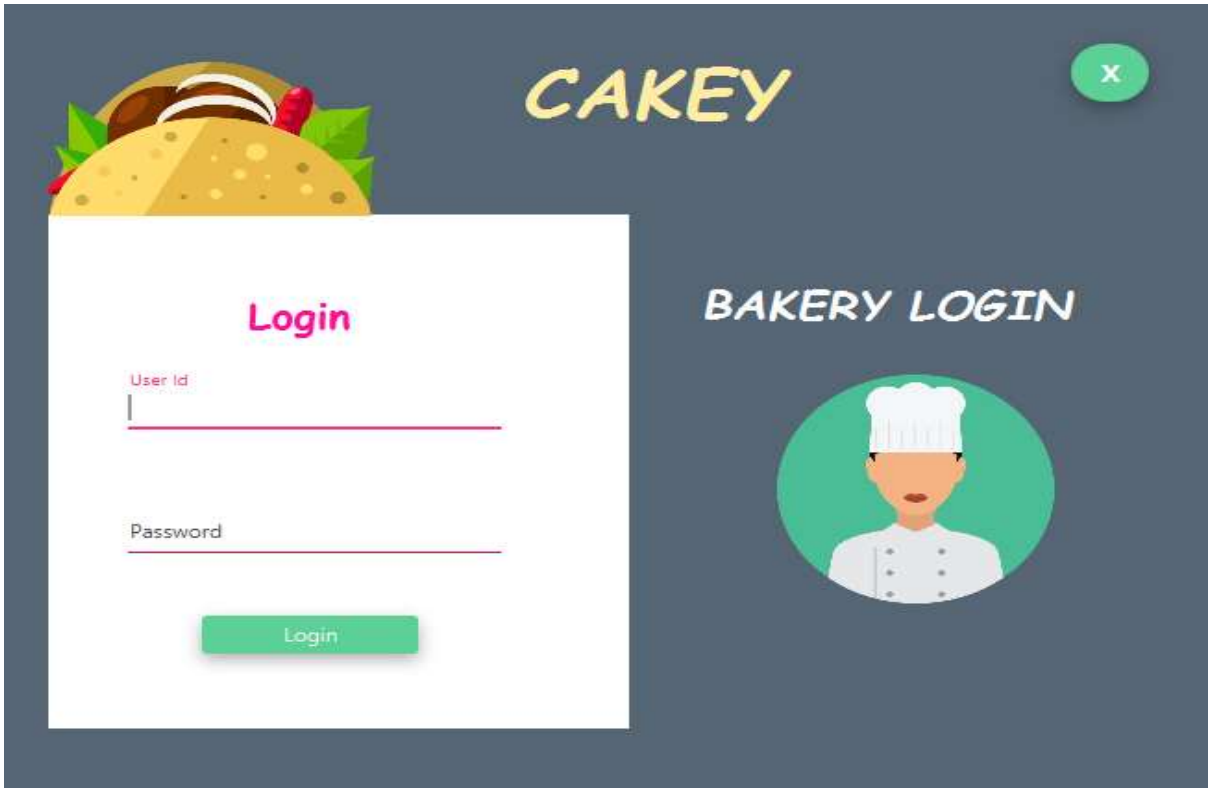

Fig 8. Bakery Page

This is the bakery login page.This is the Server side of this project. There will be one admin for this page who is the manager of the bakery .The manager can add the employee.can set a employee to deliver the cake.The admin/Manager has complete authority of orders.

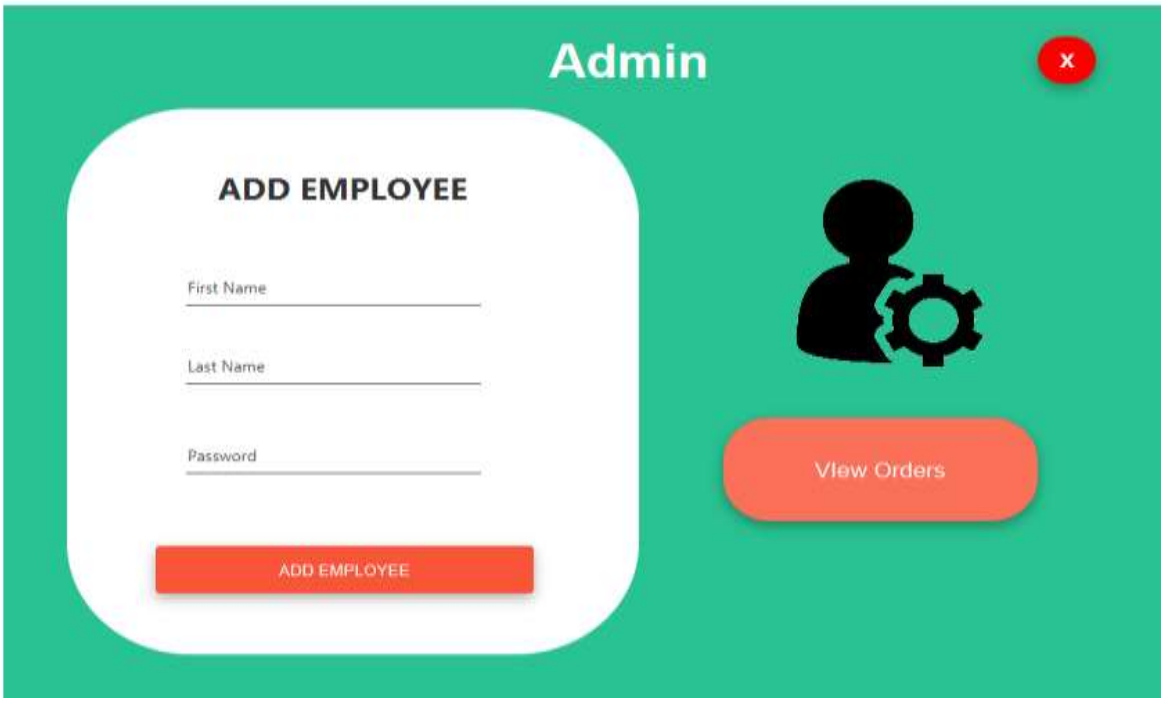

Fig 9. Admin Page

Here the admin is nothing but the manger, who manages the orders.he can view the orders and can add the employees,so that employees deliver the order to a customer.

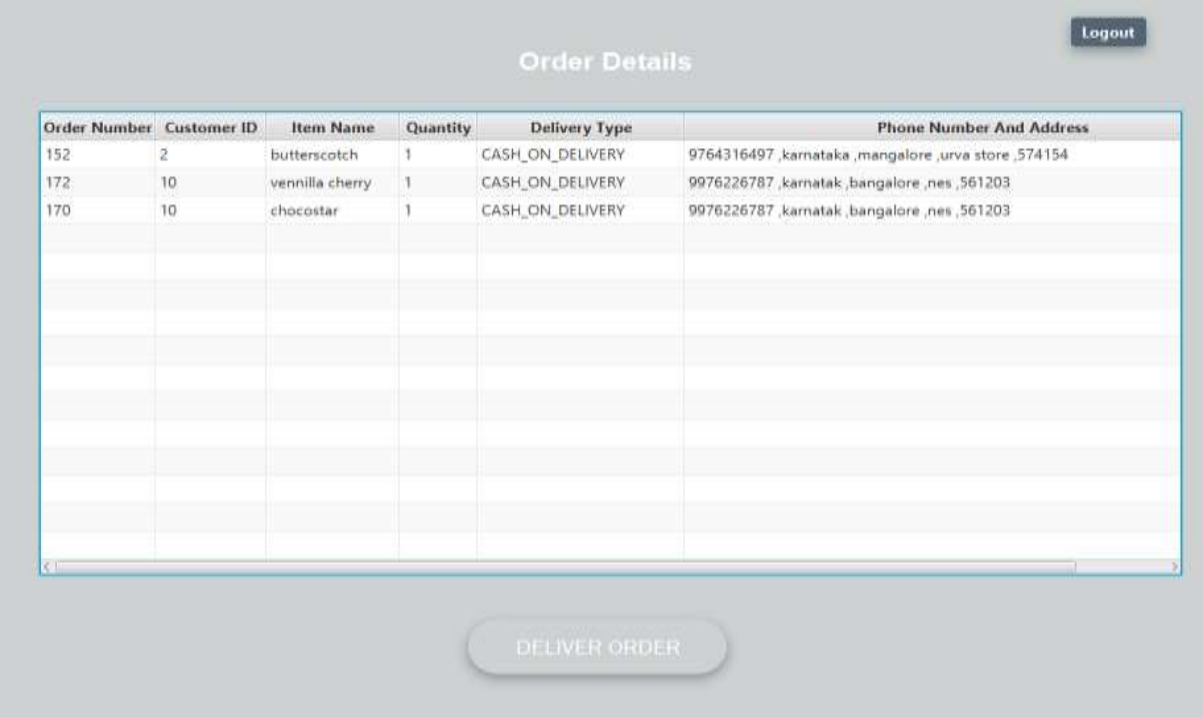

Fig 10. Orders Page

This is the orders page . The employee and the manager the access to this page.when user orders the cake,his details like address,customer id,delivery type choose,phone number,pincode of his area are provided in the delivery list,A perticuler employee will deliver the cake to customer and if it is a cash on delivery amount is accepted at the time of delivery.and deliver order button is pressed so that is is updated in the table ,that order is delivered and customer details are stored in the database.

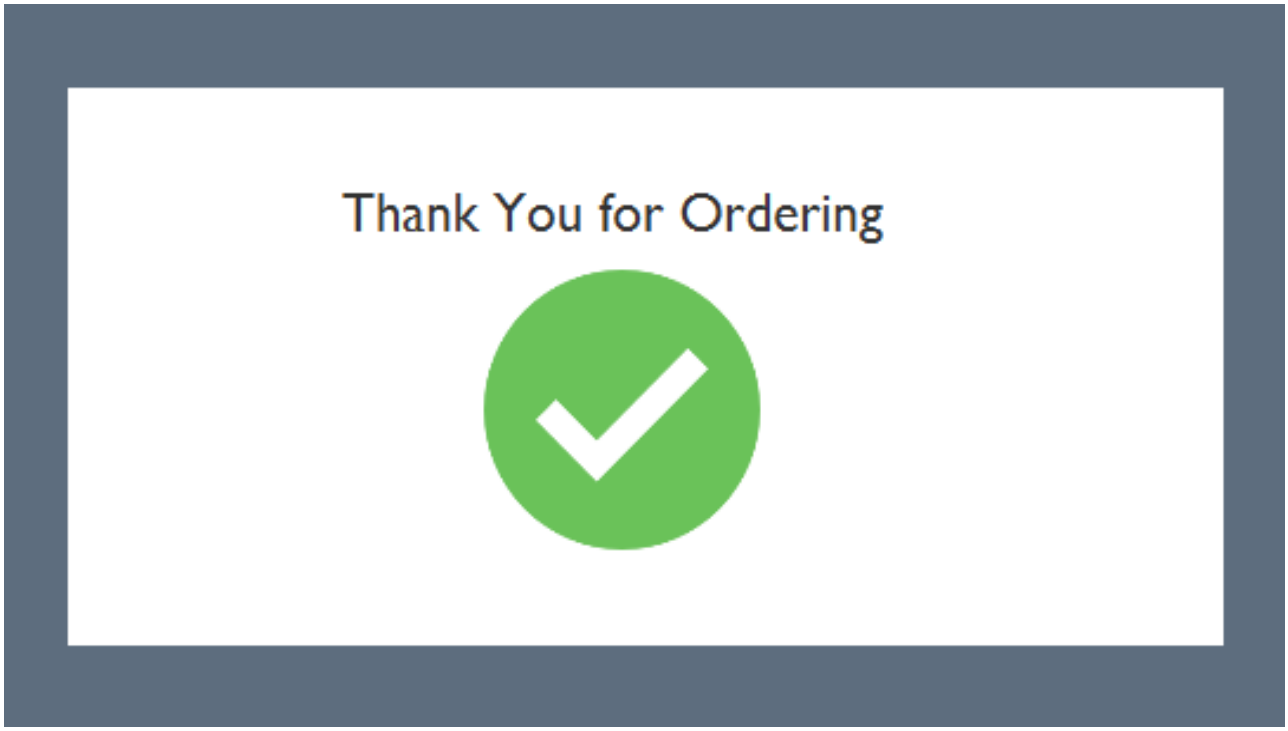

Fig 10. Order successful Window

On successful ordering user will displayed with this window indicating end of the ordering process and start of delivering process

CHAPTER 6

CONCLUSION

The **"THE ONLINE CAKE ORDERING SYSTEM "** has been computed successfully and was also tested successfully by taking into consideration the "test cases". It is user-friendly, and has required options, which can be utilized by the user to perform the desired operations.

The software or the so called application was developed using JAVA as the front end and Microsoft SQL Server as the back end in WINDOWS 10 environment. It is also hereby ensured that the goals are met by the software. The goals are:

- Optimum utilization of resources
- Efficient management of records
- Simplification of operations
- Less processing time and quick retrieval of records
- Characteristic of being portable and flexible for further futuristic enhancement.

Overall this project of ours is being developed to help the users to maintain collection of his personal movie information.

Chapter 7

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