

# **RESTAURANT MANAGEMENT SYSTEM**

Submitted in partial fulfillment of the requirements for the award of degree of

**BACHELOR OF ENGINEERING**

**IN**

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I am highly indebted to MR.ABHISHEK SHARMA, our project mentor in this session, for their guidance and constant supervision as well as for providing necessary information regarding the project ,to keep me on the correct path and also for their support and giving right direction towards completing the project.

I would like to express my gratitude towards all the sources I have gathered information from and which helped me carry out this project.

## **ABSTRACT**

This project on Restaurant Management System is based on Java platform. The project consists of two frames. The first frame is introductory and the second frame consists of management part. The second frame is divided into three parts:

### **PART 1: THE MENU SECTION**

The menu section consists of all food items available at the restaurant along with its price. The concept of checkbox is used here i.e. whichever food item, the customer wants to order can be set true by clicking on the checkbox.

### **PART 2: THE CUSTOMER DETAILS SECTION**

In this section, the restaurant manager is asked to enter various details for future reference and billing process as well such as customer name, phone number, table number, date and waiter's name.

### **PART 3: THE BILLING SECTION**

In this section, whichever food item is ordered is displayed here. After the ordering is done, on clicking total button, the bill amount is displayed including 18% GST. After clicking done, a message box is displayed that the food has been ordered.

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# INTRODUCTION

## 1.1 Problem Definition:-

Basically, in this project we have to create a number of checkbox and labels that contain the restaurant menu. Once the food ordering has to be done, the restaurant manager has to select the checkboxes and it will automatically be transferred to the billing section. The manager or biller also needs to enter the customer details and after the necessary details have been given, a message box is generated along with the total price.

## 1.2. Program Platform:-

Since the product is based on JAVA programming language which is a platform independent language, the product can run in any of the operating environment.

It doesn't require any specific platform to run. Basically we need Java Virtual Machine ( JVM ) to be installed in our machine.

In Java, programs are not compiled into executable files, they are compiled into byte code, which the JVM then executes at runtime. Java source code is compiled into byte code when we use the compiler. When the program is to be run, the byte code is converted, using compiler. The result is machine code which is then fed to the memory and is executed.

Java programs need to be compiled to byte code .When the byte code is run, it needs to be converted to machine code.

The Java classes/byte code are compiled to machine code and loaded into memory by the JVM when needed the first time.

## 1.3. Project Overview:-

The User Interface of our project is very friendly. The Restaurant Management System is a computerized program for managing the functioning of restaurant. When the program is launched, an introductory frame is opened. When we click on "order your food" button, it opens a new frame that is the main frame for managing the billing process of the restaurant. There we can see the first section consists of menu with names of food items and their corresponding prices. The biller needs to select from the given menu. The

selected food items are automatically transferred to the billing section for billing purpose. Here after, the biller needs to enter customer details along with waiter's name so as to keep the records for future reference and other taxation purposes. After this, the biller needs to click on done button; once it is pressed a message dialog box appears which reads that the order has been placed along with the total price that needs to be collected from the customer.

**RMS Restaurant Management Systems** are the crucial technology components that enable a single outlet or enterprise to better serve its customers and aid employees with food and beverage transactions and controls.

### 1.4. Hardware Specification :-

Since the project is based on java , which needs IDE so hardware must have some minimum capacity to compile and run this.

So, we need:-

- Intel 2.30 GHz or higher processor
- Minimum 2 GB RAM
- Minimum 10 GB HDD Space

### 1.5. Software Specification:-

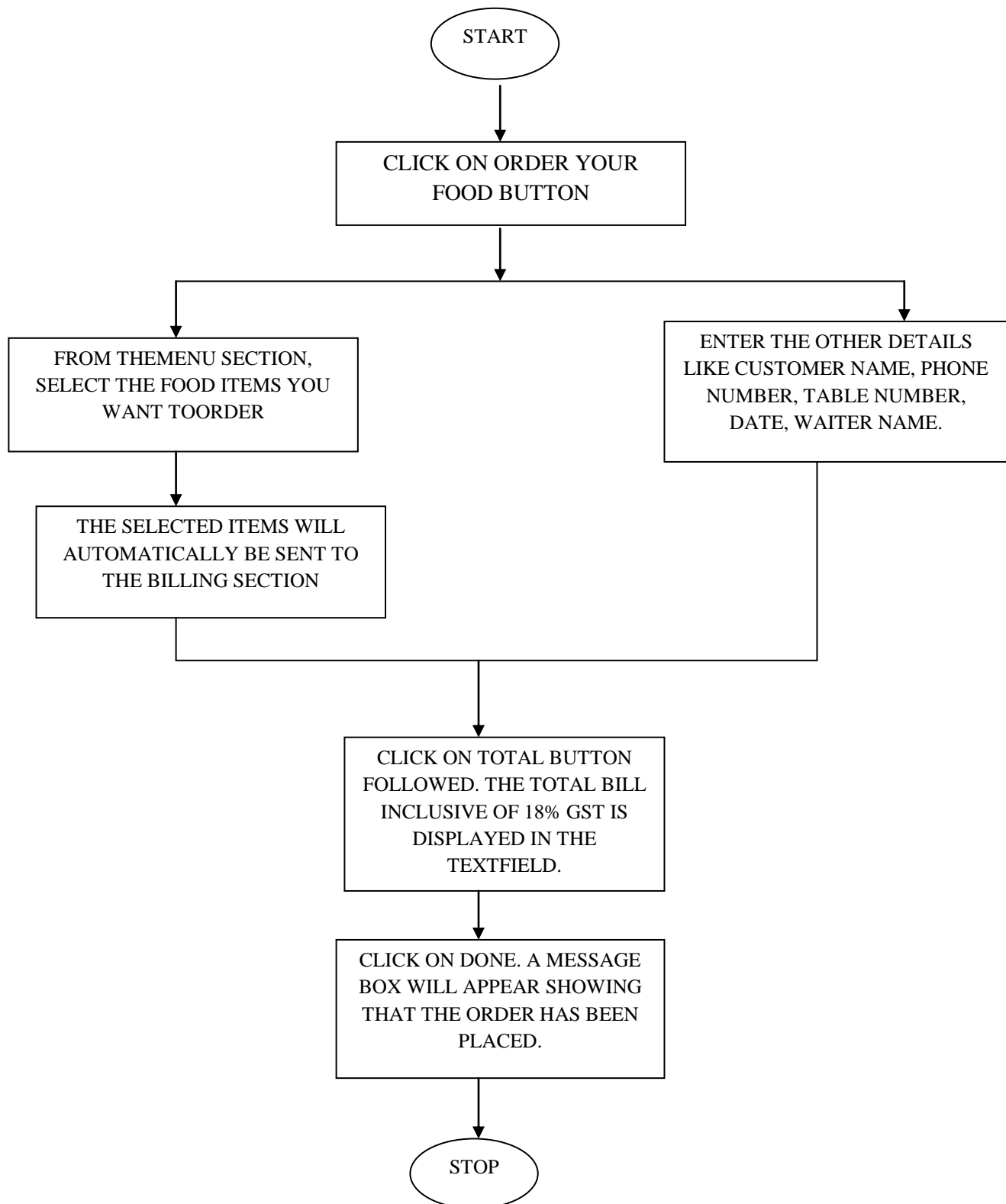
Windows 7 or more

Eclipse JDE

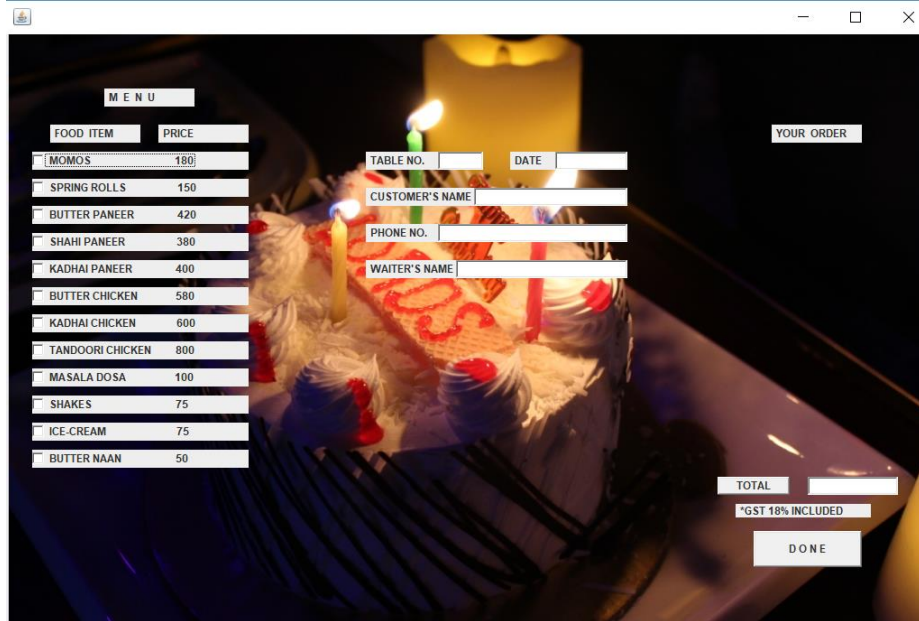
Java virtual machine

Java development kit

## PRODUCT METHODOLOGY



# SCREENSHOTS OF FRONT END WORKING



**M E N U**

| FOOD ITEM                                 | PRICE |
|---|-------|
| <input type="checkbox"/> MOMOS            | 180   |
| <input type="checkbox"/> SPRING ROLL S    | 150   |
| <input type="checkbox"/> BUTTER PANEER    | 420   |
| <input type="checkbox"/> SHAHI PANEER     | 380   |
| <input type="checkbox"/> KADHAI PANEER    | 400   |
| <input type="checkbox"/> BUTTER CHICKEN   | 580   |
| <input type="checkbox"/> KADHAI CHICKEN   | 600   |
| <input type="checkbox"/> TANDOORI CHICKEN | 800   |
| <input type="checkbox"/> MASALA DOSA      | 100   |
| <input type="checkbox"/> SHAKE S          | 75    |
| <input type="checkbox"/> ICE-CREAM        | 75    |
| <input type="checkbox"/> BUTTER NAAN      | 50    |

**YOUR ORDER**

TABLE NO.  DATE

CUSTOMER'S NAME

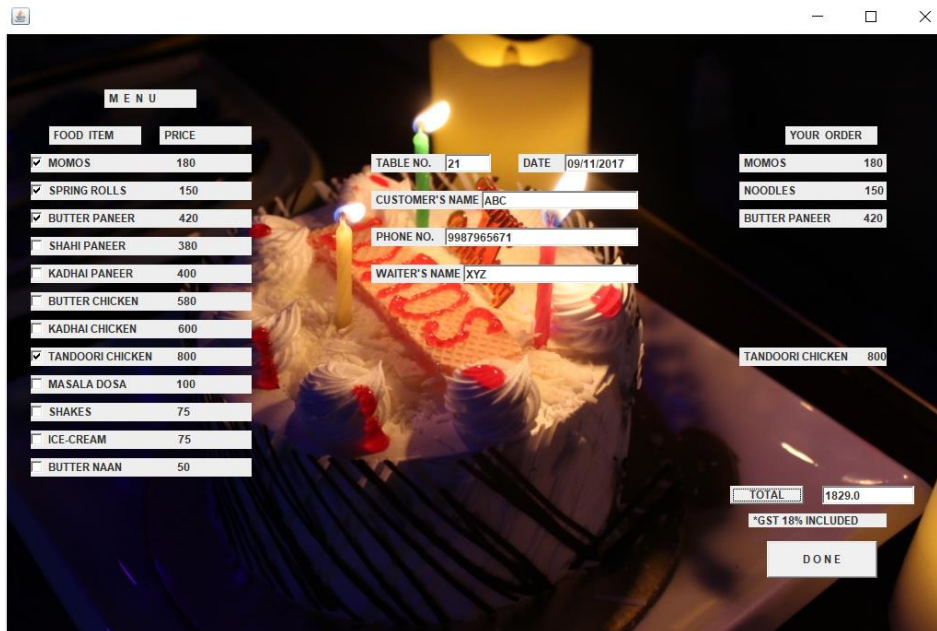
PHONE NO.

WAITER'S NAME

TOTAL

\*GST 18% INCLUDED

**DONE**



**M E N U**

| FOOD ITEM  | PRICE |
|--|-------|
| <input checked="" type="checkbox"/> MOMOS            | 180   |
| <input checked="" type="checkbox"/> SPRING ROLL S    | 150   |
| <input checked="" type="checkbox"/> BUTTER PANEER    | 420   |
| <input type="checkbox"/> SHAHI PANEER                | 380   |
| <input type="checkbox"/> KADHAI PANEER               | 400   |
| <input type="checkbox"/> BUTTER CHICKEN              | 580   |
| <input type="checkbox"/> KADHAI CHICKEN              | 600   |
| <input checked="" type="checkbox"/> TANDOORI CHICKEN | 800   |
| <input type="checkbox"/> MASALA DOSA                 | 100   |
| <input type="checkbox"/> SHAKE S                     | 75    |
| <input type="checkbox"/> ICE-CREAM                   | 75    |
| <input type="checkbox"/> BUTTER NAAN                 | 50    |

**YOUR ORDER**

TABLE NO.  DATE

CUSTOMER'S NAME

PHONE NO.

WAITER'S NAME

**YOUR ORDER**

MOMOS 180

NOODLES 150

BUTTER PANEER 420

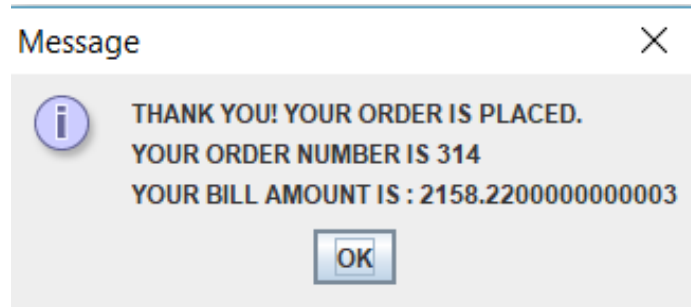
TANDOORI CHICKEN 800

TOTAL

\*GST 18% INCLUDED

**DONE**





## **CONCLUSIONS**

This project on Restaurant Management System can be very helpful for the better flow of a restaurant. The application which was developed by me during the course of project will have tremendous effect at the end user level. This project will let the user bill faster and err freely. The project has a user friendly menu selection section succeeded by customer details section and finally the billing system which shows the total amount.

### **FUTURE SCOPE**

This project has a wide application in field of Hotels and Restaurants. It is very efficient to carry out the billing process of the restaurant. Once the database is linked with the project, it can be an efficient software to manage the restaurant and ensure its smooth functioning. Transparency in the system is also felicitated by the software. Some other benefits of the project will be :

- Elimination of arithmetic errors.
- Improved guest check control.
- Increased average guest check.
- Faster reaction to trends.
- Reduced labor costs and greater operational efficiency.
- Reduced card-related expenses.
- Reduced late charges.

### **IMPROVEMENTS**

A number of improvements can be done on the project. Some of them are creating the same project with an addition of database. Database can be introduced to keep record of all the transactions and billings done sorted by their dates and customer names. A number of menus can be added to keep track of the employees of restaurant, the money transactions etc. A number of extra food items can be added according to the needs of restaurant.

## REFERENCES

### Links:

1. <https://www.javatpoint.com>
2. <https://stackoverflow.com/>
3. <https://www.tutorialspoint.com/>
4. <http://wikipedia.org/>
5. <http://www.youtube.com>
6. <http://www.bngkolkata.com/web/restaurant-management-system/>