

Restaurant Management System

User's Guide

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Introduction

Thank you for selecting the Restaurant Management System. This software is a comprehensive tool which makes managing a restaurant much easier than it actually is. It comes with its own predefined menu from various cuisines ranging from Maharashtrian all the way up to Italian from which the User can pick, choose and add some of their own.

Not only can the orders be placed and altered, but even the taxes can be calculated and bills generated and printed, if desired.

This software also supports generation of unique Customer Card numbers to keep track of the frequency of customers, so that the Restaurant can offer frequent customer discounts and thus increase their profits!

Software Requirements

Restaurant Management System needs to maintain a number of Database tables for menu items, restaurant details, Employee records, billing records etc. For this it uses:

- 1) MySQL: an open source relational database management system (RDBMS) that runs as a server providing multi-user access to a number of databases.
- 2) phpMyAdmin: enables users to graphically administer MySQL databases and visually design database structures.
- 3) XAMPP: a free and open source cross-platform web server solution stack package, consisting mainly of the Apache HTTP Server and MySQL database. It comes with the phpMyAdmin module.

Hence, this software requires to first have **MySQL** and then **XAMPP** (with Apache server) installed. Also the database tables of:

- i) Predefined menu items for cuisines: Punjabi, Maharashtrian, South Indian, Bengali, Italian, Chinese, General
- ii) phasedecide : which stores the value 'installation', 'tablesavailable' etc.

The schema restman.sql is provided to you along with the setup. Run XAMPP selecting Apache server and MySQL. Connect to localhost/phpMyAdmin in your browser using:

Data source: localhost

Username: root

Password: group2

Import the database restman.sql into it. Now you can install the software. Before any of the next runs of the software, you just need to run XAMPP selecting Apache server and MySQL. There is no need to open the browser.

Supported Operating Systems

Restaurant Management System is written in VisualC++ within the Microsoft .net programming environment. Hence, operating systems supported are:

- Windows®7
- Windows Vista®
- Windows XP

Note:

- 1) Compatibility may vary depending on user's hardware configuration and operating system. Restaurant Management System only supports Windows.
- 2) Printing of bills requires the system to be connected to a printer.

Getting Started

The first run of the software installs it on the system. This installation phase requires the superuser to navigate through a sequence of windows where all the basic information about the restaurant is decided upon. This includes the name of the restaurant, employee login details, cuisines, menu, taxes, timings, discount offers etc.

On double-clicking the software icon, the appearance of the following splash screen indicates that the installation has begun.



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Then comes a window in which the super user sets the most basic information about the **restaurant**: its **name**, **address** and **contact number**.

On clicking **Quit** button in any of these windows, the installation is interrupted and the whole process has to be repeated to install the software.

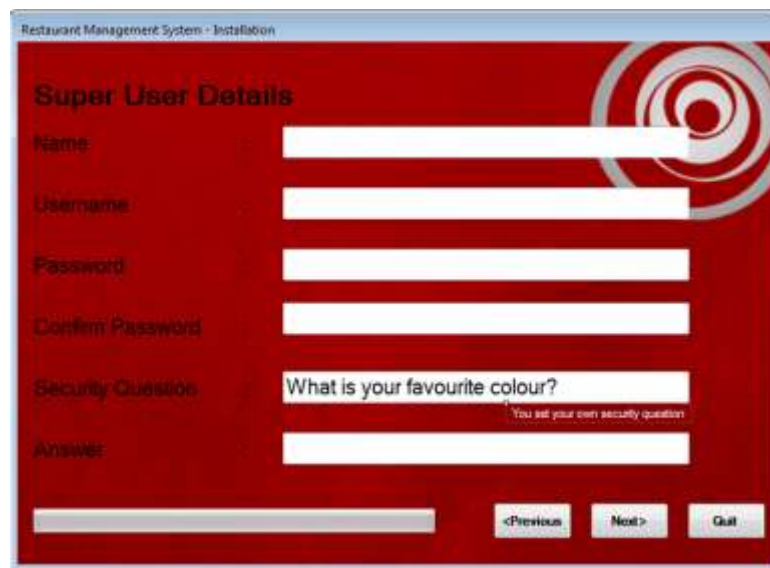
In case the super user feels that any information given in previous forms has to be changed, this can be done by quitting and reinstalling.

The **progress bar** at the bottom of each form reveals the portion of installation completed.

The image shows a screenshot of a software installation window titled "Restaurant Management System - Installation". The window has a red background. At the top, the text "Restaurant Management System" is displayed in a large, bold, black font, with "Installation" written below it in a smaller font. To the right of the text is a circular logo with concentric circles. Below the title, there are several input fields: "Name of the restaurant" followed by a single-line text box, "Address:-" followed by three stacked text boxes labeled "Street", "City", and "State". At the bottom of the window, there is a horizontal progress bar on the left and three buttons on the right: "<Previous", "Next>", and "Quit".

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The second window fixes the **super user login details**. This includes: name, username (unique for all employees), password. A field to confirm password makes sure we set the intended password. In addition to this, security question and its answer provide a way to retrieve a forgotten password. Answering all fields is mandatory. The password is stored in an encrypted form so that even though the database is accessed by any invalid login, the passwords cannot be accessed.



Restaurant Management System - Installation

Super User Details

Name

Username

Password

Confirm Password

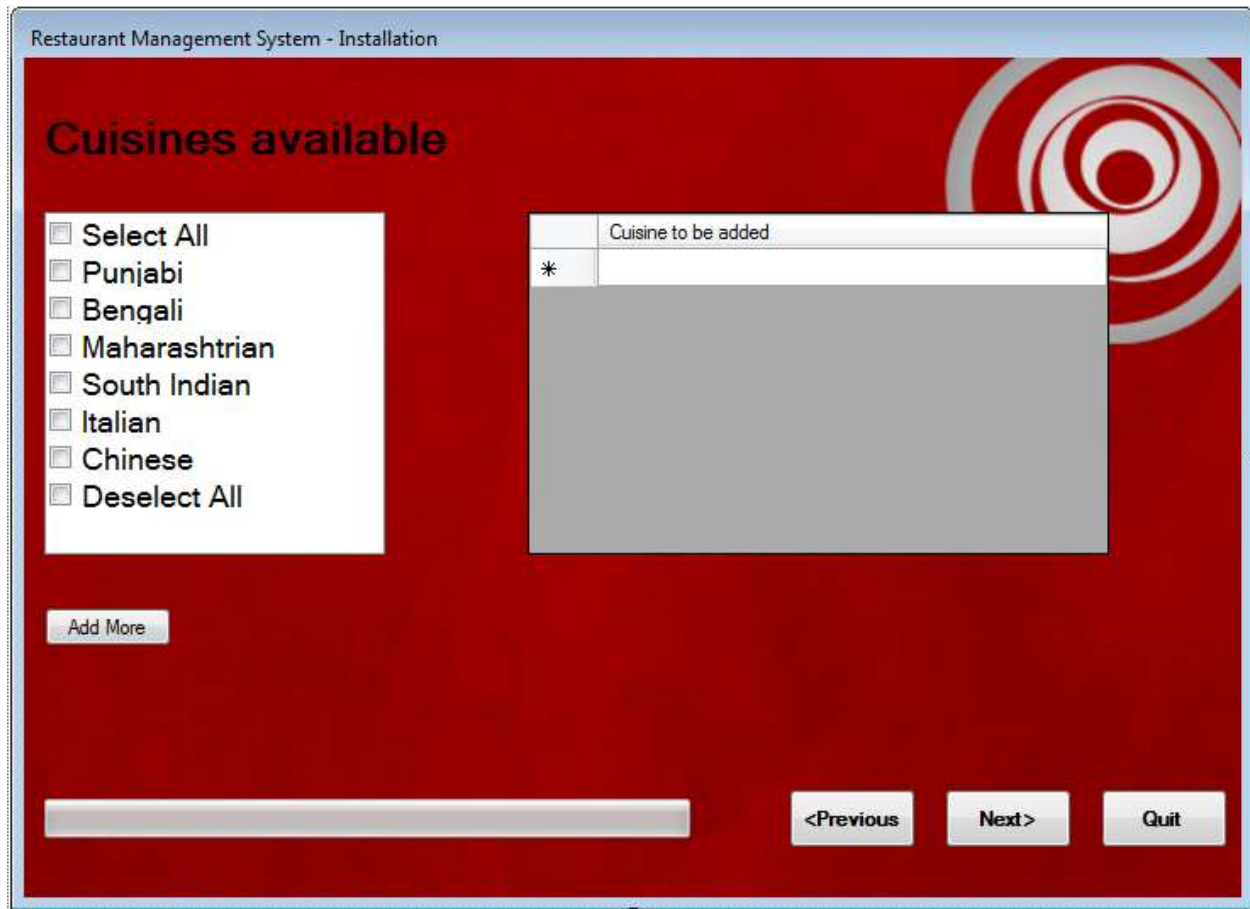
Security Question You set your own security question

Answer

Then we come to the third window. Here the **Cuisines** available in the restaurant are fixed. The super user can choose from among the given options or add his own options by clicking the **Add more** button. Later the food items can be added to the menu for only these cuisines.

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Along with these there is a default cuisine: general for miscellaneous food items.



The software can be functioned by only valid employees. For a proper login feature, the fourth window sees the super user **add employees'** login details in a format similar to his own. In case (s)he ends up adding some employees which are not to access the software, the **Remove Employee** feature allows them to select the employees they might want to remove. It needs to be

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noted that both usernames and passwords are case-sensitive.



Then, the next window fixes the more **generic details of the restaurant**, including restaurant timings (in 24-hour clock convention) during which only the orders can be placed, no. of tables (every table is supposed to

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correspond to one order each), order types offered (from Dine-in, Take-out and Home delivery) and the extra charges, if any, for the latter two. If none is selected, Dine-in is assumed by default. Time after placing the order within which to delete an order is also decided.



Restaurant Management System - Installation

Add Employee

The employee was successfully added.

Name:

Username:

Password:

Confirm Password:

Security Question:

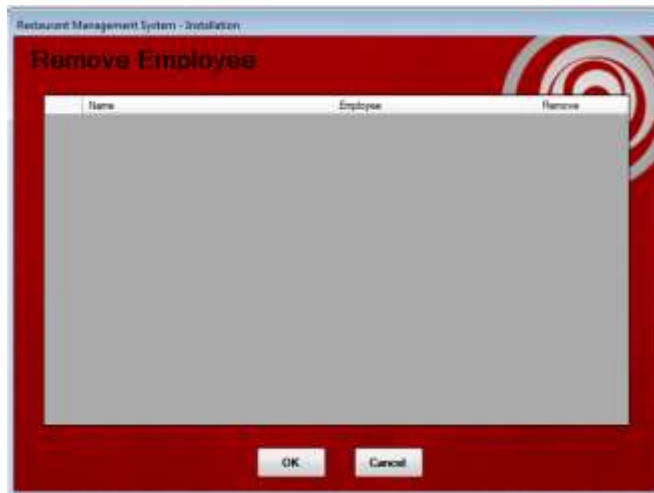
Answer:

OK Cancel Add another employee

Then in the following window the **menu details** are set. For all the selected cuisines ,the super user can one by one manage the menu i.e. select a cuisine from the combo box, from the menu items (if any) that crop up in the table below ,delete few/all by clicking respective checkboxes and adding new ones in the bottom rows. A click on the button on top saves the menu of chosen

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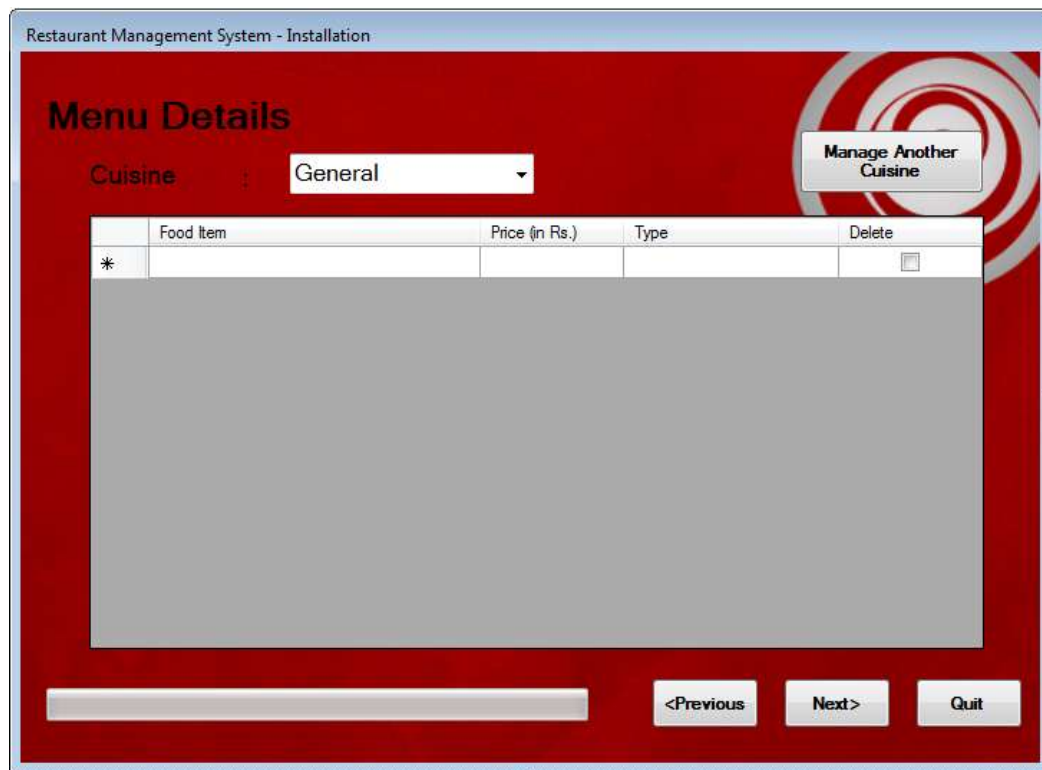
cuisine and allows us to manage another cuisine's menu. **Under no circumstances, can the first two cells be left vacant in any row of the table except the last one.**



The screenshot shows the 'Restaurant Details' form within the 'Restaurant Management System - Installation' window. The form has a red background and a white border. It contains the following fields and controls:

- Timings of the Restaurant :** From 0 : 0 0 To 0 : 0 0. Below the 'To' field, it says 'hrs' and 'min'. To the right of the 'To' field, it says 'time in 24 hrs format'.
- No of Tables :** 25
- Facilities :** A box containing three options:
 - ☒ Dine-in
 - ☐ Take out Extra Charge 0 Rs. ▼
 - ☐ Home Delivery Extra Charge 0 Rs. ▼
- Cancellation Timings :** Within 15 minutes of placing the order
- At the bottom, there are three buttons: '<Previous', 'Next>', and 'Quit'.

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Fixing **taxes** is done in the next form. As VAT (Value Added Tax) is applicable on all sales, it applies to all the items sold. Separate VAT % can be set for food items and alcoholic beverages (if any) served by the restaurant. Any amount of Service charge can be set by the super user but the Service Tax is fixed at 40% of 12.36% of Service charge i.e. 4.94%. However, an option is provided to edit this in case the government guidelines change.

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Finally, the **offers and discounts** offered by the restaurant are set. The super user can set the discount to any percentage (%) of the bill. The Frequent customer and Customer Birthday offers are valid only for Customer Card holders. On clicking on the button “Finish”, the installation completes and the normal use of the software may be started.

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Restaurant Management System - Installation

Offers

<input type="checkbox"/> Lucky Customer of the day		0	%
<input type="checkbox"/> Customer Card Offers		0	%
<input type="checkbox"/> Frequent Customer Offers	: Above 0 times	0	%
<input type="checkbox"/> Customer Birthday Offers		0	%
<input type="checkbox"/> Restaurant Anniversary Offers	Sunday	0	%
<input type="checkbox"/> Festive offers		0	%
<input type="checkbox"/> Institute Offers		0	%
<input type="checkbox"/> VIP Offers		0	%

<Previous Finish Quit

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Using your Restaurant Management System

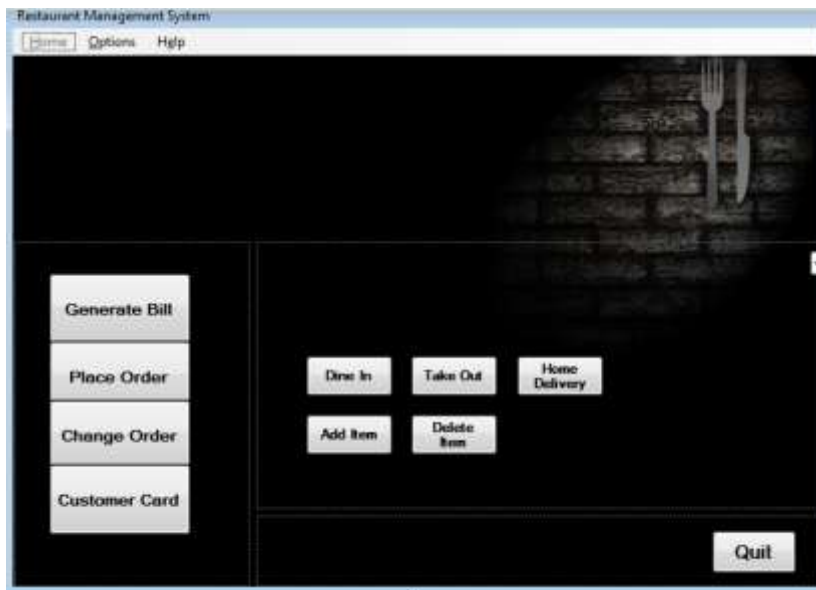
After installation, Restaurant Management System can be operated by any of the registered employees to do the various operations needed to manage a restaurant. When the application is run, if already installed, we start with a window where you are asked to **Log in**. You need to enter your username and password to do so. In case you forget your password, the link mentioned for it can be clicked which opens another window for **Password Retrieval** where on entering the username, security question can be obtained which when, in turn, answered correctly you can get back your password to go back and login through the previous window. On logging in, if the person is found to be a super user, he has an additional option of reinstalling the software in case he wants to change some settings(in home page).



On logging in, you will enter the Home page. On any form, **Quitting** closes the application and the information

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of any ongoing process (if any) will be lost. So wait for all processes to complete. On any form, the **menu** bar provides you the option to go back to **Home** page (if you are logged in), **Log out** (takes you back to the window where we started), Quit. Here, super user has a reinstall button to install again in case he needs to change settings.



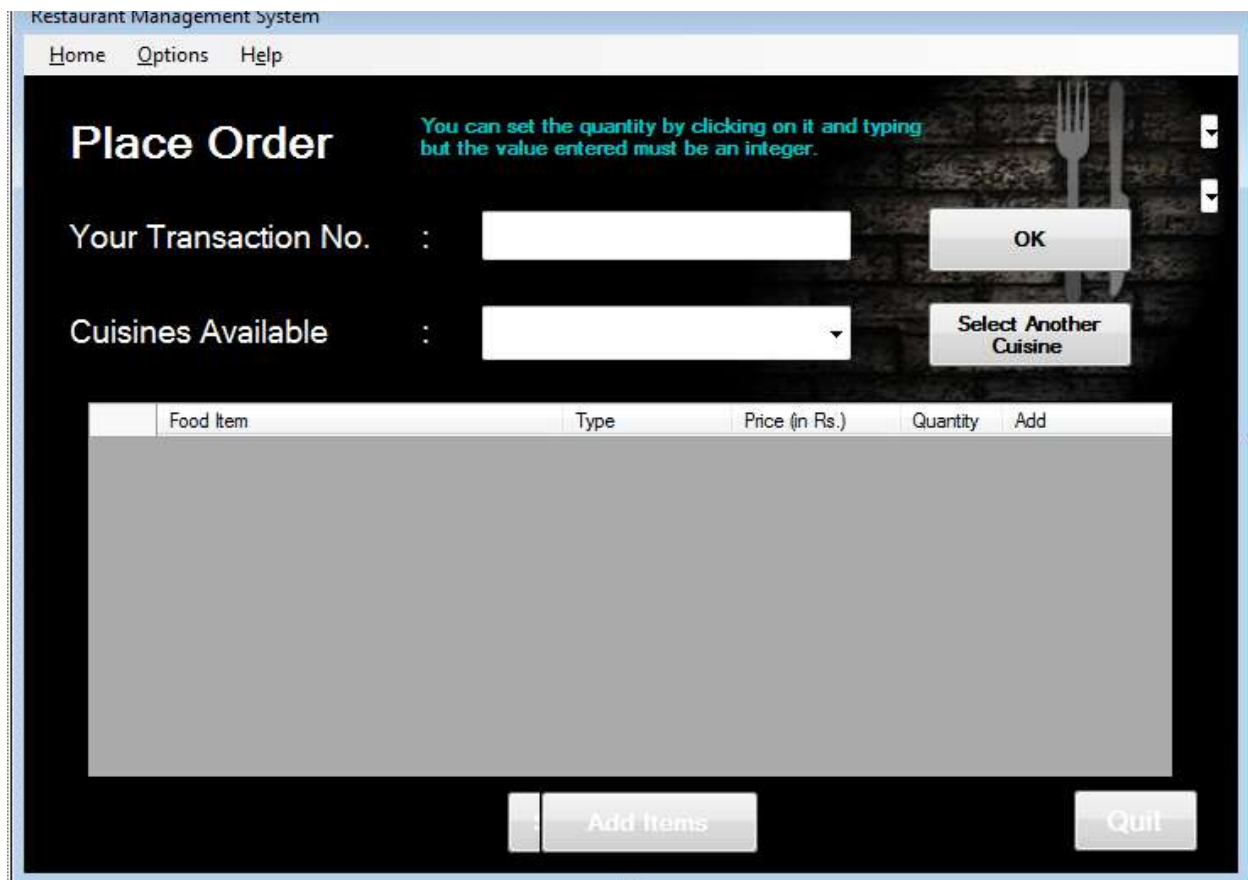
On the Home page, you will have the option to:

- 1) **Place Order**: When this button is clicked, you will be given the option to choose **order type** i.e. whether to order a Dine-in, Take-out or Home Delivery.

When any one of these is clicked on, the software checks whether the order can be placed or not i.e. whether current time is in between the opening and closing times of the restaurant or not. If it is, a window appears where the **unique Transaction No.** for this order will be displayed. Below this, a combo box is available from which any one of all the cuisines available in your restaurant can be selected. When this is done, all the menu items will be available in the table below from which any dish can be selected by just a click of the check box. For selecting a dish from another cuisine, you need to click on the “Select Another Cuisine” and choose another one from the combo box. The order can be completed by clicking of the button at bottom. This will take you back to your Home page to do any more operations.

The transaction no. of an order has two parts: date followed by the customer count (number till now) of this order of the day. Not only is this unique for every transaction but also intuitive for you to remember while using it later to generate bills, add items, delete items etc.

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Ex 1303101: for the first order on 10-03-13

i.e. transaction number is yymmddo

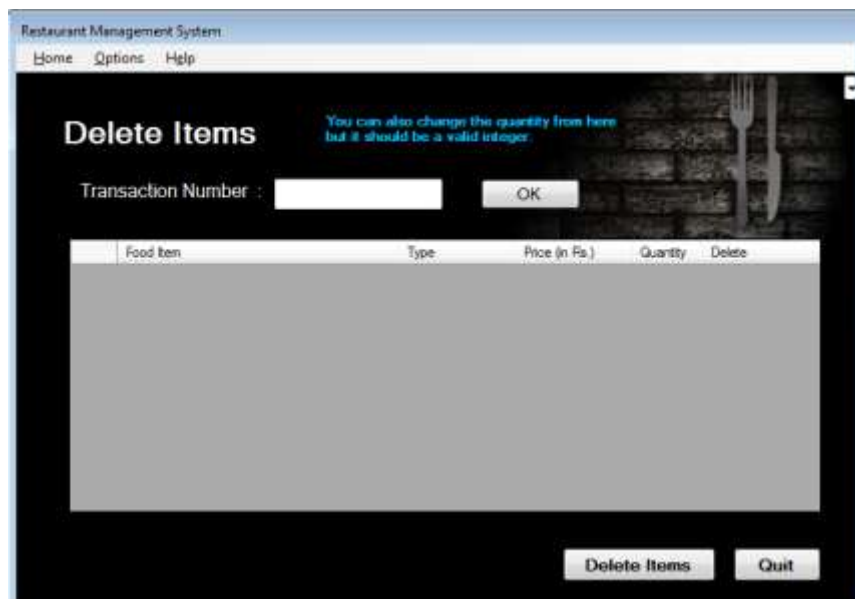
where yy are last two digits of the year

mm is the month dd is the date if greater than 10
otherwise d

o is order number (not necessarily 1 digit)

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2) **Change order:** This will give you the option to add or delete an item. When the former is selected, a window appears similar to one for placing orders, just here the transaction no. needs to be entered by you for identifying the order to add to.



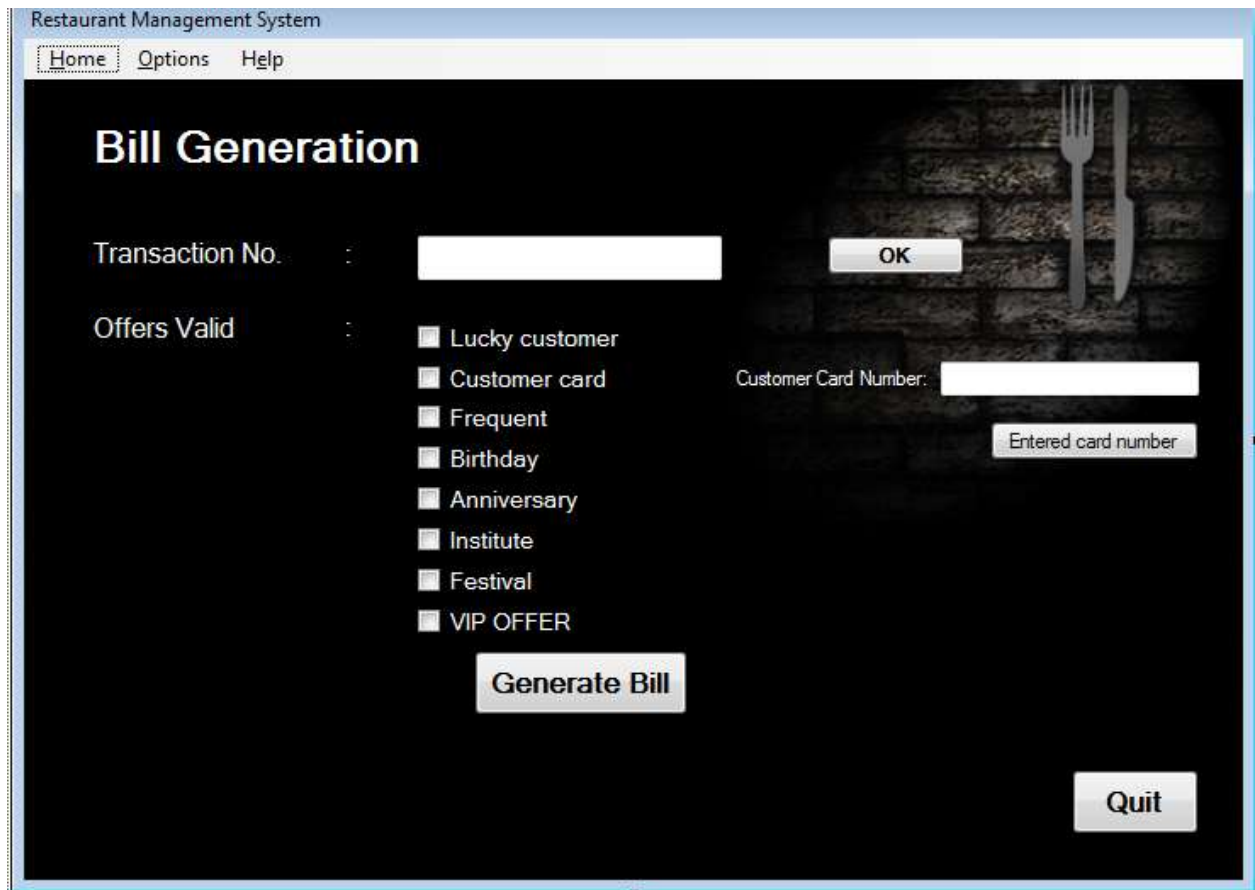
On selecting latter, a window appears where on entering a transaction no. , the order corresponding to it is displayed(if it was ordered within the already fixed maximum cancellation duration) in the table below where any item can be selected for deletion just by click of a check box. On clicking the button “Delete items”, order is updated and it will take you back to Home page.

3) **Generate Bill:** On clicking this, a window appears which on entering a valid transaction no. displays the **Discount offers** that may be applicable (some might need to be selected by you). On Clicking the “Generate Bill” button, a window is generated displaying the bill and providing an option to **generate a text file** named as the transaction no. of the bill and to **print** it also. This bill not only has the sub total of amounts per item but it also does the following:

- i) Service charge (if fixed and applicable) is calculated on the sub total (after deducting discount).
- ii) Service Tax (if fixed and applicable) is calculated on the service charge paid by the customer.
- iii) VAT is calculated on the sub total (after deducting discount) and service charge separately for food items and alcoholic beverages (should have type: alcohol)

- iv) Grand total is calculated by adding above three to the sub total and deducting the discounts.

The text file is stored in a folder named "BillsGenerated" in the same directory as the software .exe file.



The screenshot shows a window titled "Restaurant Management System" with a menu bar containing "Home", "Options", and "Help". The main area is titled "Bill Generation" and features a dark background with a brick wall texture and a fork and knife icon. The form includes the following elements:

- Transaction No.:** A text input field with an "OK" button to its right.
- Offers Valid:** A list of checkboxes for "Lucky customer", "Customer card", "Frequent", "Birthday", "Anniversary", "Institute", "Festival", and "VIP OFFER".
- Customer Card Number:** A text input field with an "Entered card number" button to its right.
- Generate Bill:** A large button centered below the offers list.
- Quit:** A button in the bottom right corner.

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4) **Customer Card:** This option allows you to generate **unique Customer card numbers** and allot them to customers when they give their personal information (anything from phone number, name or birthdate) so that tracking of customer frequency can be done. By tempting them with discounts, they can be made to come more frequently thus adding to your profits! The Customer card number is unique as it is just the date +time at which it is allotted.

i.e.(yy) (mm) (dd) (hh) (MinMin) (ss)

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Restaurant Management System

Home Options Help

Customer Card

Name :

Mobile number : Mobile number should be a 10-digit number

Birthdate : ,

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Getting Help

In case of any problems, or if you get stuck somewhere feel free to contact us and we will try our best to resolve them.

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