## Institute of Engineering & Technology Lucknow



## Department of Computer Science & Engineering

Project on

# Restaurant Management System

Submitted to: Submitted by:

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# Acknowledgement

We would like to express our special thanks of gratitude to all our teachers as well as our HOD sir Mr. S.P. Tripathi who gave us the golden to do this wonderful project on the topic(Restaurant Management System), which also helped us in learning a lot more other things. Really, these things are going to help us a lot in our future projects too. So, we are thankful to all of them.

Secondly we would also like to thank our friends who helped us a lot in finalizing this project within such a short timeframe.

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#### Introduction

In modern society the role of engineering is to provide systems and products that enhance the material aspects of human life, thus making life easier, safer and more enjoyable.

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Computer software succeeds when it meets the needs of people to use it, when it is easy to modify and even easier to use. It can and does change things for the better. We all want to build software that makes things better. To succeed, we need discipline when software is designed and build. We need an engineering approach.

The most common way to reduce the application development time is using database management system (DBMS). It allows evolutionary changes to the structure of the database without affecting the stored data and existing application.

#### Examples of DBMS:

- 1. Membership and subscription mailing lists
- 2. Accounting and book keeping information
- 3. The data obtained from scientific research
- 4. Library management system
- 5. Customer and inventory information

"RESTAURANT MANAGEMENT SYSTEM" has been proposed to be implemented to replace the manual system. The main aim of this project is computerization of all processes which happens in the restaurant. It is a database system for creating a selective retrieved of information for subsequent analysis, manipulation and application.

Visiting a restaurant traditionally involves selecting a meal from a paper menu and being waited on by the restaurant's wait staff and then standing in the queue to get their bill receipts. A busy restaurant or inattentive staff can leave customers waiting to have their orders taken, drinks refilled or to receive their bill. If the restaurant is busy the customer is left occupying a table longer than they need leaving other customers waiting. Any unnecessary waiting can reduce customer satisfaction and ultimately result in lost business. Also when changes to the menu are required, such as price adjustments or item updates, the costs and environmental concerns associated with reprinting need to be considered. To reduce customer wait times to know the menu and bill details, restaurant DBMS can be employed.

The micro-project on Restaurant Management System (RMS) helps us to understand how the databases work in restaurants and hotels. Every restaurant has many entities and every entity has many attributes. By identifying the entities, attributes and relations in the RMS it becomes easier to go forward and work on it.

# **Hardware & Software Requirements**

### Hardware:

Processor	2.0 GHz , Intel core i3
RAM	4.0 GB
Hard Disk	20 GB Free Space

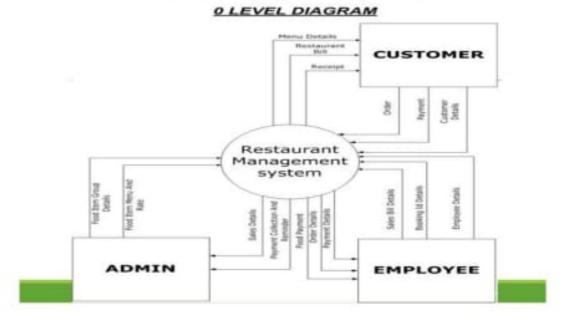
#### Software:

Operating System	Windows 10, 64-bit
Front End	Visual
Back End	Python IDLE
Development Platform	Python 3.6.3 Shell
Language	Python 3
Script	Python Scripting
File Type	.py
Other Tools	Tkinter

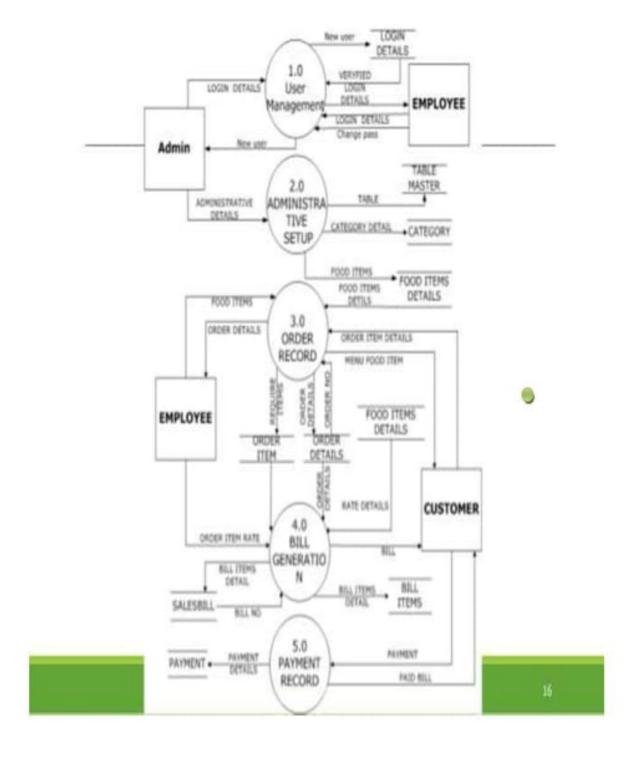
### **Gantt Chart**

Development Phase	1 to 2 day	2 to 3 day	3 to 4 day	4 to 6 day	6 to 7 day	7 to 9 day	Duration (Day)
Requirement Gathering							1
Analysis							1
Designing							1
Coding							2
Testing							1
Implementation Deployment							1
Documentation							2(Parallel)
Total time							9

#### DATA FLOW DIAGRAM

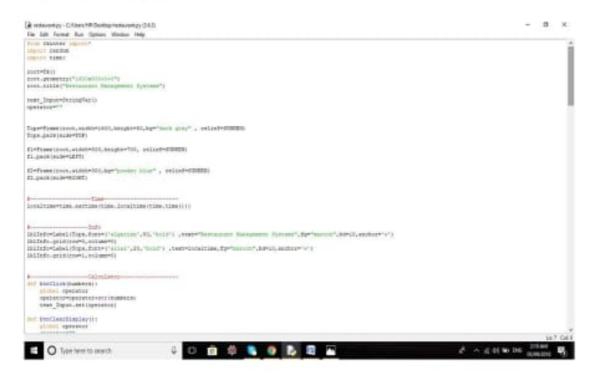


#### 1 LEVEL DIAGRAM

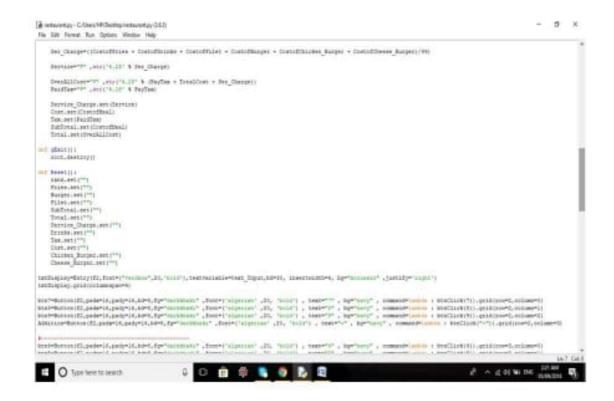


### A Glimpse of Project

#### Source Code:





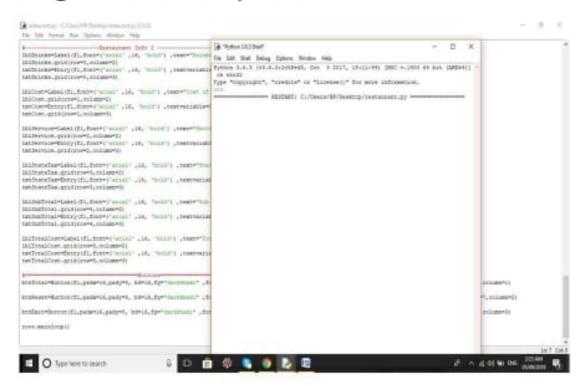


#### Details of Menu Items:

SI. No	. Name of Dish	Price per pc.		
1.	Large Fries	25		
2. Filet-o-Meal		75		
3.	Drinks	30		
4.	Burger Meal	80		
5.	Chicken Meal	120		
6.	Cheese Meal	100		

Service charge = Total cost of meal/99
State tax = Total cost of meal\*0.2

#### Program Successfully Executed:



#### User Interface Screen:



#### Conclusion

This was our first attempt of a management project. The project entitled "RESTAURANT MANAGEMENT SYSTEM" has been proposed to be implementing to replace the manual system. The developed system accomplishes all the objectives stated for the need for the change of the system. The output produced seems to satisfy all the users but it will definitely take a look forwarded for the real consequences the new system could produce. There are many improvements that are to be done in this project, but as of know whatever we have come up is performing as per standards and is upto the mark. This project was made user friendly by the use of Visual Basic enabling the user to interact easily with the database. It has also enabled the platform to serve the needs of emerging information technology trends and needs.

#### **Future Enhancement**

- Table booking will be done in advance.
- The user can become registered customers to avail attractive discount and special offers.
- Availability of food items could be known beforehand.
- · Feedbacks from customers would be added.
- Online booking to get food delivered at home.

## **Bibliography**

- During the development of our system, we have taken the reference from Books and journals, which we would like to mention in this section.
- These books acted as our tutors during the system development:

Name Author Publisher Edition

- Python Essential David M. Addison-Wesley 4th
   Reference Professional
- Core Python Wesley Chun Pearson Prentice 3rd
   Applications Prog. Hall
- Besides these we were referring the online manuals from the sites:

https://www.python.org/downloads/windows/

https://www.techinfected.net/2016/02/make-gui-calculator-in-python-windows-linux.html

https://www.python.org/about/gettingstarted/