VEER KUNWAR SINGH UNIVERSITY

ARA



S.V.P COLLEGE , BHABUA

(KAIMUR)

PROJECT Synopsis

BCA 6TH SEMESTER

Restaurant Management System

GUIDED DEVELOPED BY

Mr. Ashutosh Kumar Singh Amarjeet Sharma

(MCA) Roll No.:194010900011

S.V.P COLLEGE BHABUA Reg. No.:19401651438

**&**

Wasim Khan

Roll No.:194010900051

Reg. No.:19401651480

**Certificate**

This is to certify that Amarjeet Sharma & Wasim Khan has Successfully Completed.The document is benefited copy of the original document. This Project is developed under the guidance by **Mr. Ashutosh Kumar Singh** for the final semester of B.C.A course of S.V.P College Bhabua.

**Mr. Ashutosh Kumar Singh**

Project Co-ordinator

**About University**

Veer Kunwar Singh University

Veer Kunwar Singh University named after the well known national hero and distinguished freedom fighter of 1857 was established on 22nd October 1992,October 1992 with its Head Quarter at Ara, under the Bihar University Act 1976 [as amendment Act 9 of 1992]. Its jurisdiction covers four western educationally backward districts of Bihar [ Bhojpur, Buxar, Kaimur, & Rohtas]. It serves the educational needs of more than one crore population of these districts through its 20 University Post Graduate Departments, 17 Constituent Degree Colleges, three Law Colleges and forty seven affiliated Degree Colleges. This University has already been enlisted in the list of recognised Universities under Section 2(f) of the U.G.C Act. All its 17 Constituent Colleges and one affiliated College are receiving financial assistance from U.G.C by virtue of being Constituent/Affiliated Colleges of erstwhile Magadh University, Bodh-Gaya Bihar.

Keeping in view the inadequacies of the facilities for Higher Education and Research in this region Veer Kunwar Singh University has introduced new courses like B.C.A, B.Sc.(IT) B.B.A, B.Sc (Bio-Technology), M.Sc.(Env. Science), M.A. (P.M.I.R) ad Bachelor of Bank Science and Information Science from the academic session 2006-07, various U.G.C , the constituent and affiliated college have introduced Certificate /Diploma /Advanced Diploma programme such as D.C.A Rural Management, Tissue, culture, Fisheries, hospital waste Management , Fashion designing E-commerce and computer hardware maintenance. The need for strengthening its extension activities, the University has submitted a proposal to the State Government.

For improving the quality of Governance at grass root level, the University in anxious to introduce Traning Programme for the elected representatives of Panchayati Raj and public functionaries with Panchayati Raj in collaboration with the State Government.

**CURRICULUM-VITAE**

**ASHUTOSH KUMAR SINGH**

Vill+Post-Mokari, P.s-Bhabua

Dist-Kaimur,Bihar(821101)

Mob-9771952099

Email:ashumaxz@gmail.com

**ASHUTOSH KUMAR SINGH**

**Career Objective:**

To Enhance My personal skill through serving your esteemed organization .

**Strength:**

To Sincerity, positive attitude, punctual, Strong commitment towards task

Undertaken.

**Academic Qualification:**

: Post Graduation(MCA) SMU, Gangtok in 2008

: Graduation From V.K. Singh University, Ara in 2004.

: 10+2th From U.P Board From UP in 2001.

: 10th From B.S.E.B, BHABUA in 1999.

**Technical Qualification:**

* Done Three year advance Diploma in computing from Edexcel Foundation London(2001-2004).

**Experience:**

: Working from one year in Gov. B.S.S.S. Dr. Ambedkar Nagar No-2

Sect-IV New Delhi at MIS Project (2004 to 2007).

: Working from S.V.P College Bhabua as a Computer Teacher in BCA

Dept. (2007 to Till Date).

**Personal Details:**

Father’s Name : Shri Shrikant Singh

Date Of Birth : 23/01/1985

Nationality : Indian

Sex : Male

Marital Status : Single

Hobbies : Traveling, listening song, reading,Newspaper.

Place : Bhabua. …………………………….

**Signature**

**Acknowledgement**

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Thank you so much sir for showing us a right path to enhance and explore our career.

Thank You Sir…

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**INTRODUCTION**

The **Restaurant Management System** is to generalize and simplify the monthly or day to day activities of restaurant like food activities ,check in of new customer, check out of customer , assigning a food according to customer requirement , and finally compute the bill etc.

Which has to be performed repeatedly on regular basis. To provide efficient, fast, reliable and user-friendly system is the basic motto behind this exercise. And show the café food choice, order food.

The main aim of the entire activity is to automate the process of day to day activities of café like food choice, A new customer, assign a food according to customer’s demand, checkout of a computer and releasing the food and finally compute the bill etc.

**ABSTRACT**

A Restaurant Management System” is developed using connectivity between MySql and Java.

The proper “Restaurant Management System” is implemented to reduce the manual work and enhances the accuracy of work in a restaurant.

We propose to build a software project that can efficiently handle and manage various activities of a restaurant and all activities will be happening under the supervision of the administrator. Hence the project is developed proficiently to help restaurant owner’s automata, their business operations. The standalone System which we deployed can be accessible by both customer and manager .

In this management system we will provide an application that can be viewed by the customers to know the particular restaurant. There will be different items available in a restaurant many customers will be coming at different time for having food, they will be eating different items available in the restaurant .

Restaurant owner has to maintain records off each sales and purchase.

The system will save time and will be easy to use when compared to normal work which will be done in papers.

**Objective**

Creation of software is ideal solution for the hospitality industry that can be used at Restaurant, motels, resorts , suits, and breakfast operations.

The software aims at creating an café management system which can be used by customers to order café food.

Users can check the status of food and facilities.

The administrator will know the details of order and daily income. The software avoid manual and repetitive work and provide real time information of availability of foods.

This software allow user to search and order a café food over at any time from anywhere. This software also improve the decision making.

This software covers various aspects in café management system and always performs user friendly. It helps to ease staff with facilities for order process. It saves the time which was wasting more in manual work.

A Restaurant management system application where manager can add/view/delete customers

Details who visited restaurant and daily consumed items add customer can view this application in restaurant (if we made it accessible) and lookup recepies and about the particular restaurant.

**Users of the Application:-**

1. Admin(Manager)
2. Customer

**Functional Requirements:-**

* **Manager**
* Can login to do following activities.
* Can add/view/delete customer details.
* Can add/view new item to menu.
* Can view/update daily consumed food.
* **Customer**
* Can view menu.
* Can see the other details(history, contact, address) of restaurant.

**Tools Languages Used**

**Application :-** Database Management

**Front End :-**Java Swing

**Back End :-** Mysql Server

**System Environment**

**Processor :-**Intel i5 Processor ( 1.30 GHz)

**RAM :-**8GB

**Operating System:-**Window 2011 , Window 9x

**Database :-**Mysql workbench 8.0

**Accessing Databases**

Data in the following databases can be accessed in Mysql workbench.

**JDBC :-**

Java database connectivity (JDBC) is the java Soft specification of a standard application programming interface (API) that allows java program to access database management system. The JDBC API consists of a set of interfaces and classes written in the java programming language.

Using these standard interfaces and classes, programmers can write applications that connect to database, send queries written in structured query language (SQL), and process the results.

Since JDBC is a standard specification, one java program that uses the JDBC API can connect to any database management system(DBMS), as long as a driver exists for that particular DBMS.

**Jet Database :-**

Database Created using the jet database engine. Microsoft Access also uses the jet database engine as its data manager eomponent.

**MySql:-**

Mysql (“My S-Q-L”, officially, but also called “my sequel”) is (as of July 2022) the world’s second most widely used open-source relational database management system(RDBMS). It is named after co-founder Michael wideness daughter, my.the SQl phrase stands for structured query language. The mySql development project has made its source code available under the terms of the GNU general public license, as sell as under a variety of proprietary agreements. MySQL AB, now owned by Oracle corporation. MySQL is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open source web application software stack (and other ‘AMP’ stack). LAMP is an acronym for “Linux, Apache, MySQl, Perl/PHP/Python.”

Free-software-open source projects that require a full-featured database management system often use MySQL. For commercial use, several paid editions are available, and offer additional functionality. Applications which use MySQL database.

**HTML:-**

HTML or Hyper Text Markup Language is the main markup

language for creating web pages and other information that can be displayed in a web browser.HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like ), within the web page content. HTML tags most commonly come in pairs like <h1> and <h1/> although some tags represent empty elements and so are unpaired, for example **Error! Filename not specified.**. The first tag in a pair is the start tag, and the second tag is the end tag (they are also called opening tags and closing tags). In between these tags web designers can add text, further tags, comments and other types of text-based content. The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page.HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages.

**CSS:-**

Cascading Style Sheets (CSS) is a style sheet

language used for describing the look and formatting of a document written in a markup language. While most often used to style web pages and interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages use CSS style sheets to describe their presentation.CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple pages to share formatting, and reduce complexity and repetition in the structural content (such as by allowing for table less web design).CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices.

It can also be used to allow the web page to display differently depending on the screen size or device on which it is being viewed. While the author of a document typically links that document to a CSS file, readers can use a different style sheet, perhaps one on their own computer, to override the one the author has specified. However if the author or the reader did not link the document to a specific style sheet the default style of the browser will be applied.CSS specifies a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities or weights are calculated and assigned to rules, so that the results are predictable.

**JAVA SCRIPT:-**

JavaScript (JS) is a dynamic computer programming .

language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed. It is also being used in server-side programming, game development and the creation of desktop and mobile applications. JavaScript is a prototype-based scripting language with dynamic typing and has firstclass functions. Its syntax was influenced by C. JavaScript copies many names and naming conventions from Java, but the two languages are otherwise unrelated and have very different

Semantics. The key design principles within JavaScript are taken from the Self and Scheme programming languages. It is a multiparadigm language, supporting object-oriented, imperative, and functional programming styles. The application of JavaScript to use outside of web pages—for example, in PDF documents, site-specific browsers, and desktop widgets—is also significant. Newer and faster JavaScript VMs and platforms built upon them (notably Node.js) have also increased the popularity of JavaScript for server-side web applications. On the client side, JavaScript was traditionally implemented as an interpreted language but just-in-time compilation is now performed by recent (post-2012) browsers.

**Database:-**

Java Application

JDBC Driver Manager

Vendor supplied JDBC driver

JDBC/ODBC

bridge

ODBC driver

Database

Database

**Software Description**

**Development phase:-**

In the development phase, the system is constructed to fulfil the requirements outlined in the design phase.

Development phase activities include preparing manuals and training customers, writing and testing computer programs are part. At the conclusion of the development phase, the system is ready to be put into use.

This phase includes with a presentation of the complete system for acceptance by the user, at management review meeting. To Ten at twenty days, finally the testing of the computer programs may take twenty more days.

**Processor:-**

A processor is a piece of hardware is capable of executing programs. A name is required for each processor, there are no particular constraints upon processor names, because they denote hardware not software entities.

**Devices:-**

A device is a piece of hardware incapable of executing programs. A name is required for each device. There are no particular constraints over device names and in fact their names may be quite generic.

**Connections:-**

Processors and devices must communication with one another. Using undirected line we may indicate the connections between a device and a processor.

A connection may also represent more indirect coupling such as satellite to ground communications. connections are usually considered to be bi-directional, although if a particular connection is unidirectional, an arrow may be added to show the direction. Each connection may include an optional label that names the connections.

**Data Flow Diagram Login Page:-**

Customer/Admin Login Page



User/Admin

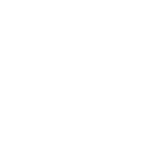


Enter

username or Password



Verify Users



User

Database

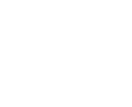
**Data Flow Diagram Home Page:-**



IF

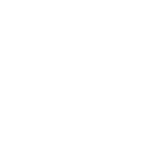


Home Page



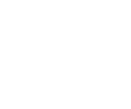
Manage

Product



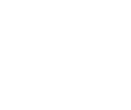
Login

Database



New

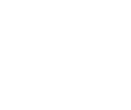
Product



Place

Order

Items

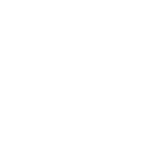


Update

Product

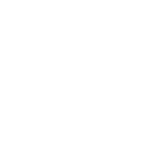
Items

Bill



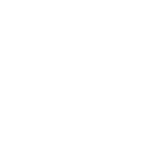
Produc t

Database



Product

Database

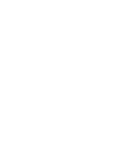


Login

Table



AVBL



IF NO

Product

-

**Data Structure**

Here Mysql is used as back end. All tables are made in access. In this project Restaurant Management System , There are Four tables present to maintain the record. These tables are :-

1.User

2.Product

3.Category

4.Bill

**ER-Diagram**

**User:-**

Signup

**Forgot Pasword :-**

Forgot Password

**Login :-**

Login

**Product:-**

Product

**Category :-**

Category

**Bill:-**

Bill

**Restaurant Management System :-**

Admin

User Login

User

Has

Permission

Category

RMS

Bill

Product

1

Has

Order

**Module Description**

**Login Module:-**

This module takes the user authentication and allows the user to proceed further if the validation is correct, else repeat the process maximum three times or terminate the user id & Password is not correct.

**MDI Main Module:-**

This project consist a main form module which provide the link to all other module from the help of its menus, basically this is MDI application form module and all others module having child of this.

**Further scope of the project**

This project is applicable to many real world problem.

Because most of the customer use the restaurant and the Admin need to maintain the record of each details.

This make user to maintain record of the details and the customer record easily and to update records.

It the user forgot the details he taken from the restaurant you can remind him/her by looking their Bill in which date, name of the details and the admin.

**Conclusion**

We were able to create a computerized system for silk route to maintain billing & Restaurant records. This system is able to store billing records securely and retrieve the records whenever needed easily. Data entering of customers and admin are also included in this system along with the order and the billing process. Customers, restaurant records and are interconnected in order to maintain the accuracy of the system . this system can also be further improved adding many other features and including the other systems as well. Finally we believe that we were able to lunch an effective computerized system to the restaurant causing the restaurant to perform well in the future regarding the billing and restaurant records.

**References**

* + - Complete Reference in java.
    - YouTube.
    - Google.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*THE END\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*