

Visvesvaraya Technological University, Belgavi
Government Engineering College, Hassan - 573201



Mini Project Report On
“Cyber Cafe Management System”

Submitted in partial fulfilment of fifth semester Database Management System
LABORATORY WITH MINI PROJECT (18CSL58) in Computer Science and Engineering.

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ENGINEERING
GOVERNMENT ENGINEERING COLLEGE, HASSAN**



2020 - 2021

CERTIFICATE

This is to certify that **Mr. JAYANTH KUMAR S, USN:4GH18CS011** and **Mr. JEETHENDRA S R, USN:4GH18CS012** has satisfactorily implemented the mini project titled “**CYBER CAFE MANAGEMENT SYSTEM**” in fifth semester DBMS Laboratory with mini project (18CSL58) as per the requirements of **Visvesvaraya Technological University, Belagavi** for the academic year 2020-2021.

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Name and Signature of Examiner with Date

1.

2.

DECLARATION

We, **JAYANTH KUMAR S** and **JEETHENDRA S R** students of fifth semester B.E, **GOVERNMENT ENGINEERING COLLEGE, Hassan** bearing USN **4GH18CS011** and **4GH18CS012** respectively, hereby declare that the project entitled “**CYBER CAFE MANAGEMENT SYSTEM**” has been carried out by us under the supervision of our Guide, **Mr. ANNAIAH H**, B.E., M.Tech, MISTE, Assistant Professor, Dept. of CS&E, GEC Hassan and **Ms. CHANDANA H M**, B.E., M.Tech, Assistant Professor, Dept. of CS&E, GEC Hassan, have submitted in partial fulfilment of the requirements for the award of the Degree of B.E in CS&E by the Visvesvaraya Technological University, Belgavi during the academic year 2019-2020. This report has not been submitted to any other Organization/University for the award of degree or certificate.

Project associates

Jayanth Kumar S

Jeethendra S R

Date:

Place : Hassan

ACKNOWLEDGEMENT

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Project Associates

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

Computers have become a way of life for today's high society. Many aspects of modern life that we have to accept as common place would not be possible if there were no computers. Today computers are used extensively in many areas of business, science, education etc. The major advantage of computer is its speed that makes it able to give some useful information very quickly. Another feature is its accuracy.

This project is intended to be used in Cyber Cafe. All cyber cafes have some basic needs likeable to control the systems that are being rented to the customers and are charged on timely basis. This project only have server part which runs on Admin system .

The Admin should have control over the usage of the client system and keep track of what the client is doing. Computers can hold data and instruction in an electronic representation in internal memory and this data can be retrieved at any time.

1.2 PROBLEM STATEMENT

In existing system a lot of manual work has to be carried out. Large amount of paper work is involved which may cause high degree of error. Registration of user names, keeping records of user are done manually, which is time-consuming process and there is possibility of making errors.

Administrator has to keep the track of time, which is tedious job. Once the user logs out, while preparing bill, he has referred to user details including name, login time and time allocated leading to possibility of causing errors in bill calculation. This may be non-beneficial to administrator.

Also a lot of files, records are required to store these documents thus making it difficult to maintain. Since all these reports are prepared manually, we require computer software for all these purposes. Hence also there is not accuracy in bill calculations.

1.2 SOLUTION

The project entitled "Cyber Cafe Management System" is a software package, which can be used in cyber cafes for managing the clients and billing.

As this is automated cyber management system it makes it very easy for administrator to search details. Also the time allotment is done very efficiently and it provides fast service in term of the bill calculation and time management.

In this system admin can briefly view total number of user come in cyber cafe, add new users, update out-time, price and remarks, and view details of old users.

Its major advantage is that it records the type of terminals accessed by the customers and full details of the customers are recorded in the database so that if any enquiry is needed by anyone later it can be systematically done. It works the admin front so user cannot manipulate or access any part of the information in the system.

1.3 OBJECTIVE

- The aim of our project is to replace the paper works & works done manually and to automate the existing trend in the cyber cafe. Be it user creation, their management or bill generation, everything is computerized. Since the admin job is done effortlessly.
- To keep the track of time and user details including name, login time and time allocated efficiently.
- To maintain and store files, record and documents in the internal memory and retrieve whenever required.
- It makes it very easy for administrator to search details. Also time allotment is done very efficiently and it provides fast service in term of the bill calculation and time management.

CHAPTER 2

SYSTEM REQUIREMENT SPECIFICATION

2.1 FUNCTIONAL REQUIREMENT SPECIFICATION

Functional requirements are related to the system behaviour only for the certain inputs that should satisfy. They are linked to the expectations from the intended software. They are also called as product features.

2.1.1 CREATING ACCOUNT

Description:

This will make the account for the user which will be required to login whenever the user will open the software.

Response Status:

It will check if the length of the username cross the specified limit, if so it will display error.

2.1.2 CREATE LOGIN INTERFACE

Description:

Create a login interface which provide authentication to the valid owner to access the other informations.

Response Status:

If the entered username or password is not in database it will reload the same page. It will open the next interface if the login credentials are correct.

2.1.3 INPUT SYSTEM INFORMTION

Description:

Ask owner to provide necessary system information for the system to operate further.

Response Status:

Store the entered system information in the database.

2.1.4 SHOW SYSTEM INFORMATION

Description: Show the user the system information.

Response Status:

No response as there is no input just it will display the informations.

2.1.5 ENTER CUSTOMER INFORMATION**Description:**

Ask the user the works it want to perform in café and what are his requirements.

Response Status:

Record the requirements in the database.

2.1.6 VIEW CUSTOMER INFORMATION**Description:**

Show the user the information about the customers who have visited till now.

Response Status:

No response as there is no input.

2.1.7 CHECKOUT**Description:**

To provide the bill after the out-time of the customer.

Response Status:

It provides with the bill calculation after checking out.

2.2 NON-FUNCTIONAL REQUIREMENT SPECIFICATION

- **Performance Requirements:** The primary performance requirement is processor speed and its better data parallelism hardware support. More the core better will be system performance. Intel coreI7 and Intel coreI5 are recommendable.
- **Safety Requirements:** There are no safety requirements with this application, other than any normal hazards of password disclosure.
- **Security Requirements:** The data of the users who have visisted the shop which is stored in the database should not be disclosed with anyone except the investigating authority with permission. This is important for the user privacy. The system should withstand any cyber attack if done.

- **Maintainability:** The software should provide the ease to change the data on which it operate like it has been mentioned in functional requirements that there should be a function to change the system information like rates etc.
- **Adaptability:** The system should inform the user if he tries to enter any value which is not practically possible because that might be any logical or typing error.

2.3. SYSTEM REQUIREMENTS

System requirements are expressed in software requirement document. It is the official statement for what is required for the system developers. Requirement document include the requirement definition and requirement definitions user requirement specification.

The software requirement document is not designed document. It should set out what the system should do without specifying how it should be done.

1. Storing the information of the components and events in the customized database.
2. Accessing information of the components.
3. Making queries for modifying component and event details.

2.3.1 HARDWARE REQUIREMENTS

Processor : Intel core3 processor and above.

RAM : 4GB and more.

Hard disk : 16GB and more.

2.3.2 SOFTWARE REQUIREMENTS

1. XAMPP
2. HTML
3. CSS
4. PYTHON AND DJANGO

XAMPP:

The full form of XAMPP stands for Cross platform, Apache, MariaDB (Mysql), PHP and Perl.

HTML:

HTML stands for hypertext mark-up language, which is the most widely used language on web develop web pages.

CSS:

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a mark-up language like HTML.

PYTHON AND DJANGO:

Python is known for its general-purpose nature that makes it applicable in almost every domain of software development. Python makes its presence in every emerging field. Django is an one of the most popular web framework. Django is versatile in nature which allows it to build applications for different-different domains.

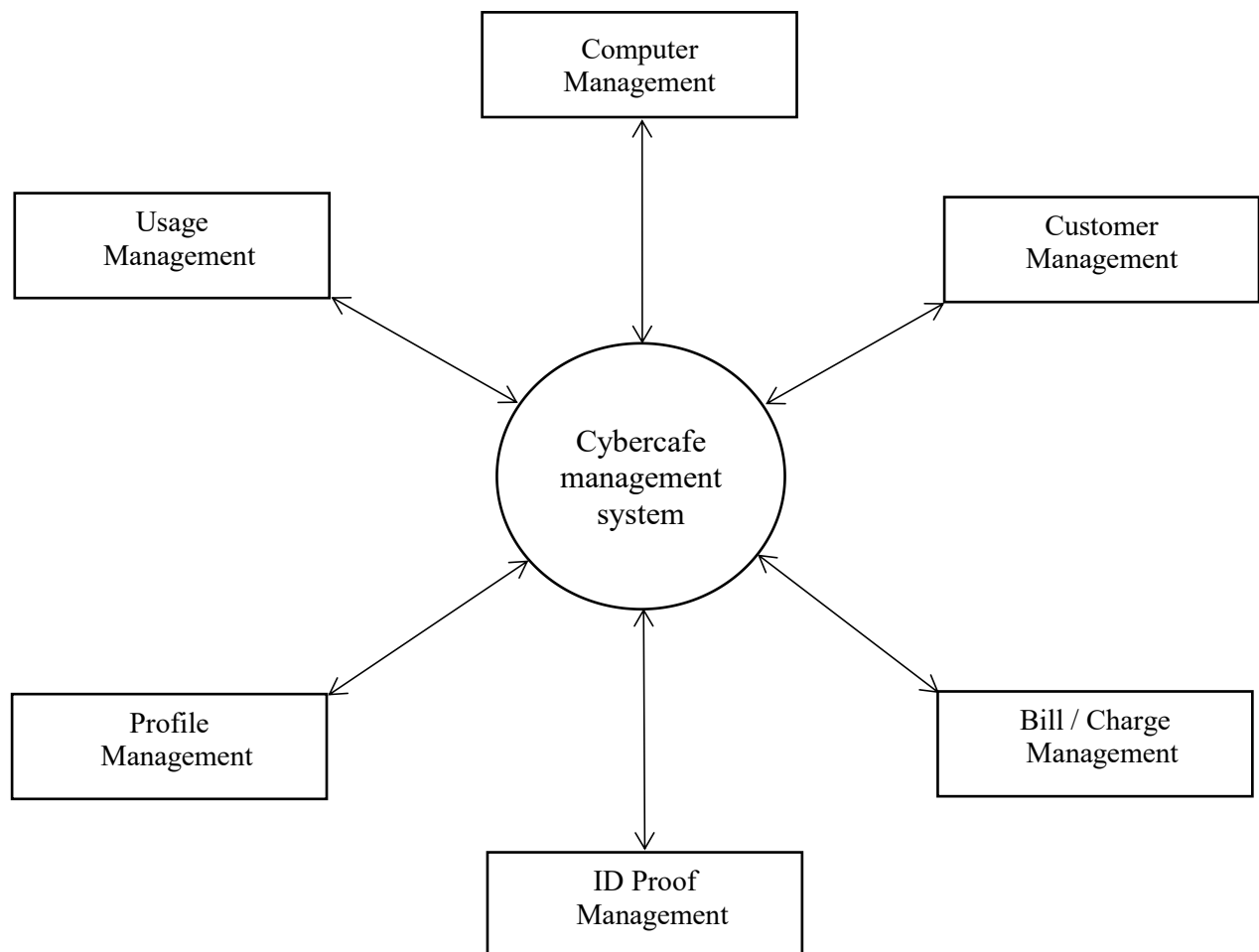
CHAPTER 3

SYSTEM DESIGN

3.1 DESIGN DIAGRAM

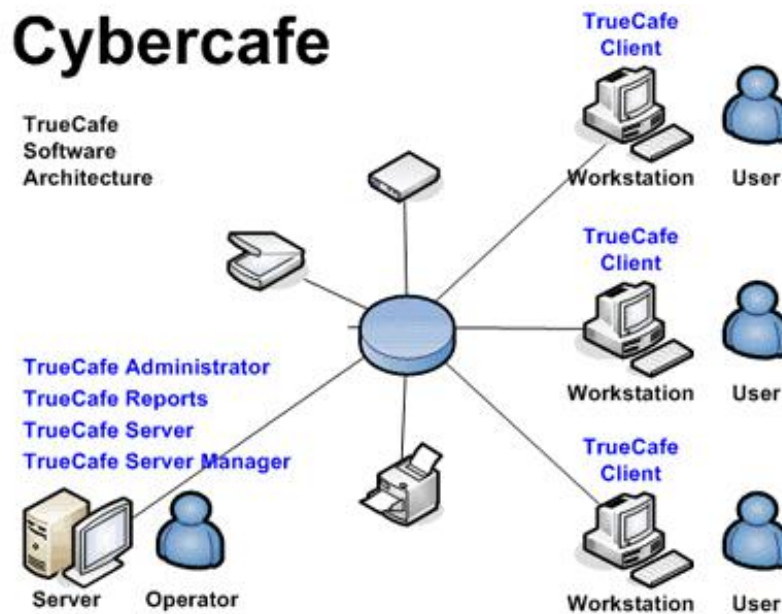
Design diagram helps to identify the essential components of an Event details management system like events, components, facilities, teams, registration, achievements.

3.1.1 DATAFLOW DIAGRAM (DFD)



- A dataflow diagram is a graphical view of data is processed in a system in terms of input and output.
- The dataflow diagram(DFD) contains some symbol for drawing the data flow diagram.
- The fig shows the neccessary elemental actions performed in the Cyber Cafe Management System.

3.1.2 SYSTEM ARCHITECTURE

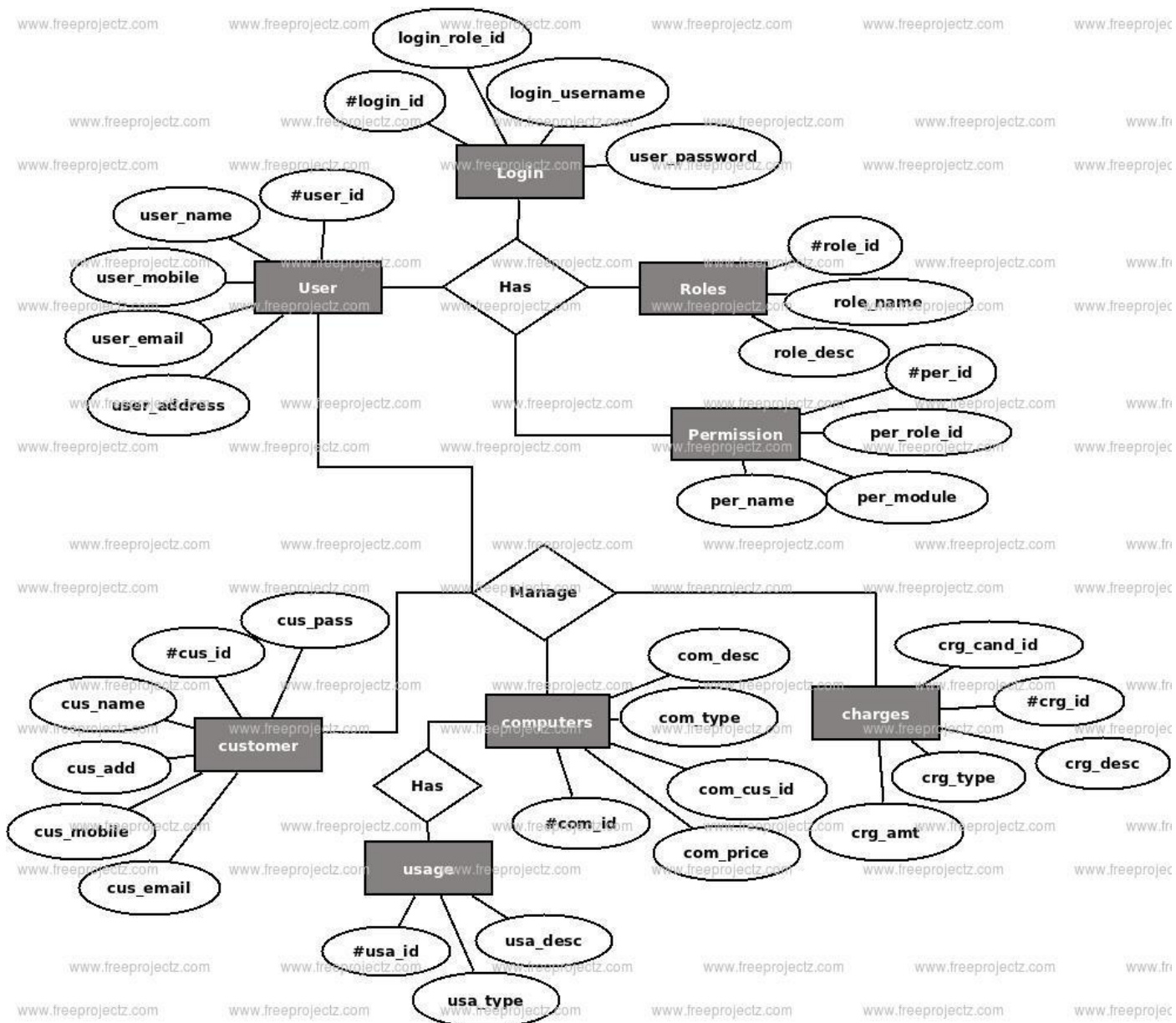
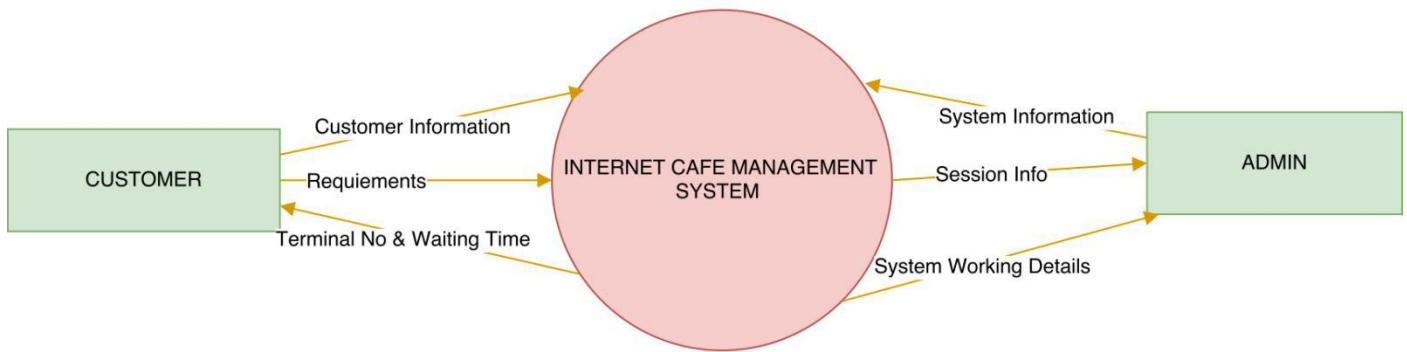


- The basic client/server architecture is used to deal with a large number of PCs, web servers, database servers and other components that are connected with networks.
- The client /server architecture consists of many PCs and workstations which are connected via the network.

3.1.2 ER DIAGRAM

An Entity Relationship Model (ERM) in software engineering is an abstract and conceptual representation of data. Entity Relationship modelling is a relational schema database modelling method, used to produce a type of conceptual schema or semantic data model of a system, often a relation database, and its requirements in a top-down fashion. An Entity-Relationship Diagram (ER Diagram) is a specialized graphics that illustrates the interrelationship between entities in a database. ER Diagrams often use symbols to represent three different types of information. Boxes are used to represent 'Entities'. Diamonds normally represent the 'Relationship' and Ovals are used to represent 'Attributes'.

CONTEXT LEVEL DIAGRAM



ER Diagram For Cyber Cafe Management System

CHAPTER 4

IMPLEMENTATION

4.1 LANGUAGE USED

Python with Django

Python is known for its general-purpose nature that makes it applicable in almost every domain of software development. Python makes its presence in every emerging field. It is the fastest-growing programming language and can develop any application.

We can use Python to develop web applications. It provides libraries to handle internet protocols such as HTML and XML, JSON, Email processing, request, BeautifulSoup, Feedparser, etc. One of Python web-framework named Django is used on **Instagram**.

Django is an one of the most popular web framework. It has widely supportive community and channels to share and connect. Django is versatile in nature which allows it to build applications for different-different domains. Now a days, Companies are using Django to build various types of applications like: content management systems, social networks sites or scientific computing platforms etc.

4.2 PLATFORM

4.2.1 UBUNTU PLATFORM

Ubuntu is a free and open-source operating system and Linux distribution based on Debian. Ubuntu is offered in three official editions: Ubuntu Desktop for personal computers, Ubuntu server for server and the cloud, and Ubuntu core for internet of things devices and robots. New releases of Ubuntu occur every six months, while long-term support releases occur every two years, and the most recent one is, 20.04 LTS.

XAMPP

X-Cross-platform enable us the use on different types of computer or with different software packages.

A-Apache is open-source cross-platform web server software that allows website owners to serve content on the web and hence the name Apache “web server”..

M- MariaDB is a community-developed fork of the MySQL relational database management system. MySQL is an Oracle-backed open source relational database management system (RDBMS) based on Structured Query Language (SQL).

4.3 TRIGGERS

MySQL trigger is a named database object which is associated with a table and it activates when a particular event (e.g. an insert, update or delete) occurs for the table.

CREATE TRIGGER creates a new trigger in MySQL. Also learn tools to create MySQL Triggers, Example on AFTER INSERT, BEFORE INSERT, AFTER UPDATE, AFTER DELETE triggers.

4.4 STORED PROCEDURES

Stored procedure is a procedure in SQL stored in a database which can be called by database engine and connected programs. Stored procedures may return result sets that are the results of a SELECT statement. Such result sets can be processed using cursors, by other stored procedures, by associating a result-set locator, or by applications. Stored procedures may also contain declare variables for processing data and cursors that allow it to loop through multiple rows in a table.

4.5 MODULES

- 1) Dashboard
- 2) Computer
- 3) User
- 4) Search
- 5) Profile
- 6) Change Password
- 7) Logout

4.5.1 MODULE DESCRIPTION

1. **Dashboard:** In this section admin can briefly view total number of computers and total number of user come in cyber cafe.
2. **Computer:** In this section, admin can manage the computers(add/update).
3. **Users:** In this section, admin can add new users, update outtime, price and remarks, and view details of old users.
4. **Search:** In this section admin can search users on the basis of entry id.
5. **Profile:** In this section admin can update his/her profile.
6. **Change Password:** In this section admin can change his/her passwords.
7. **Logout:** Through this button admin can logout.

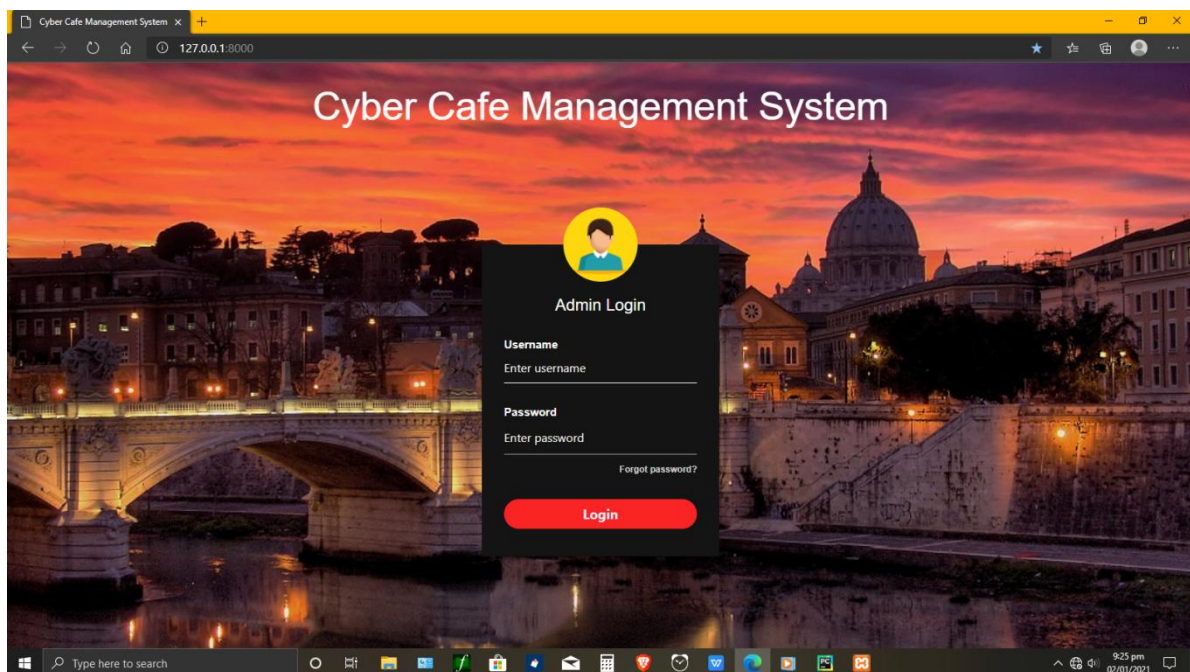
CHAPTER 5

IMPLEMENTATION OF RESULTS

5.1 SNAPSHOTS

Admin Login Page

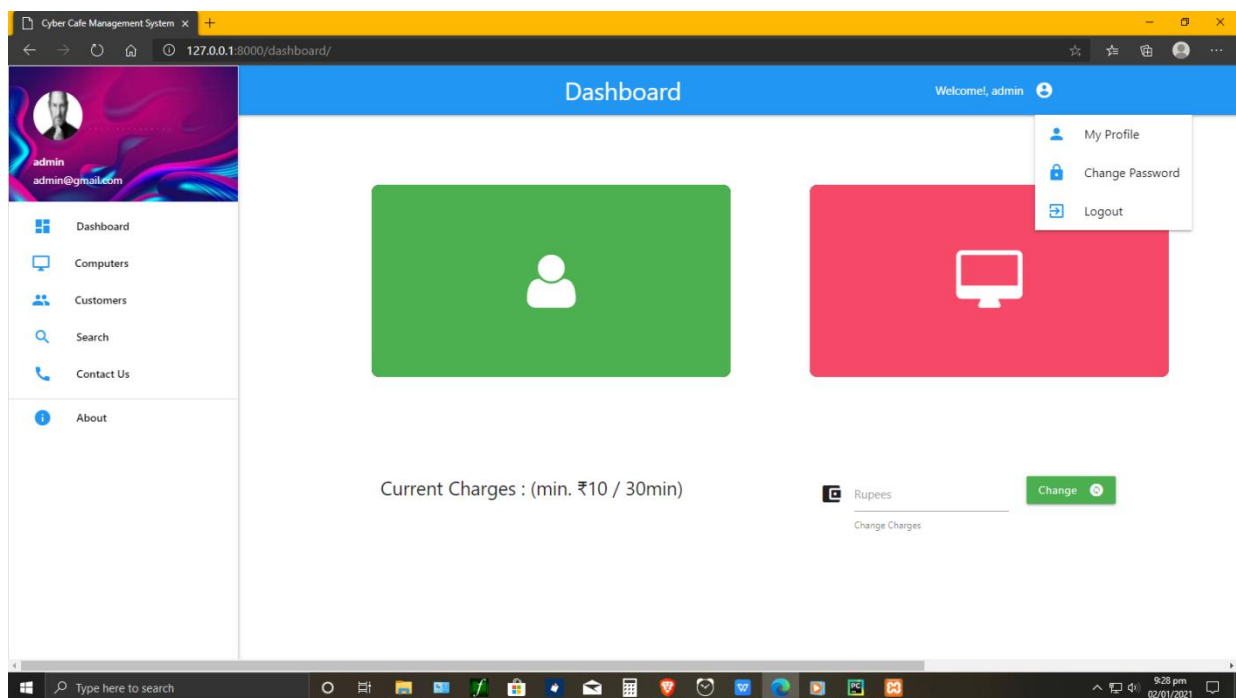
A login, logging in or logging on is the entering of identifier information into a system by a user in order to access that system (e.g., a computer or a website). It is an integral part of computer security procedures. A login generally requires the user to enter two pieces of information, first a user name and then a password.



Here, The user has to login with the username and password that was given previously while creating an Account.

Dashboard

a dashboard is a user interface that, somewhat resembling an automobile's dashboard, organizes and presents information in a way that is easy to read. However, a computer dashboard is more likely to be interactive than an automobile dashboard.

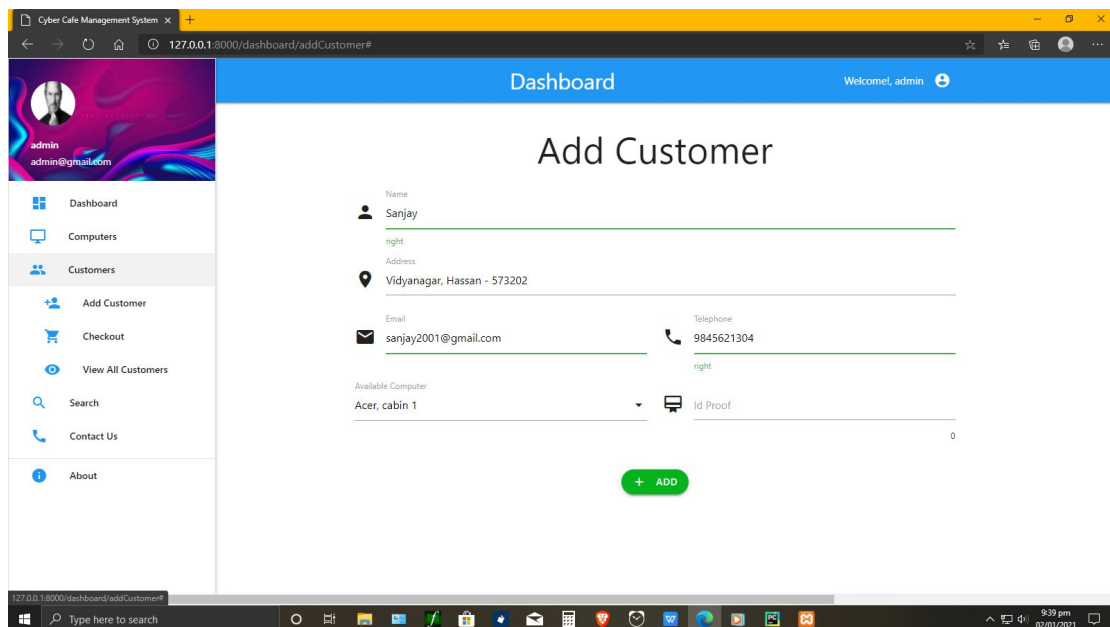


The Dashboard contains all the necessary modules in one place. Thus, it makes it easy for the admin/user to perform his/her tasks easily and efficiently.

Computer Section

Add Computer

This page allows admin to add computers and computer's location to check the occupied and vacant cabin for users.



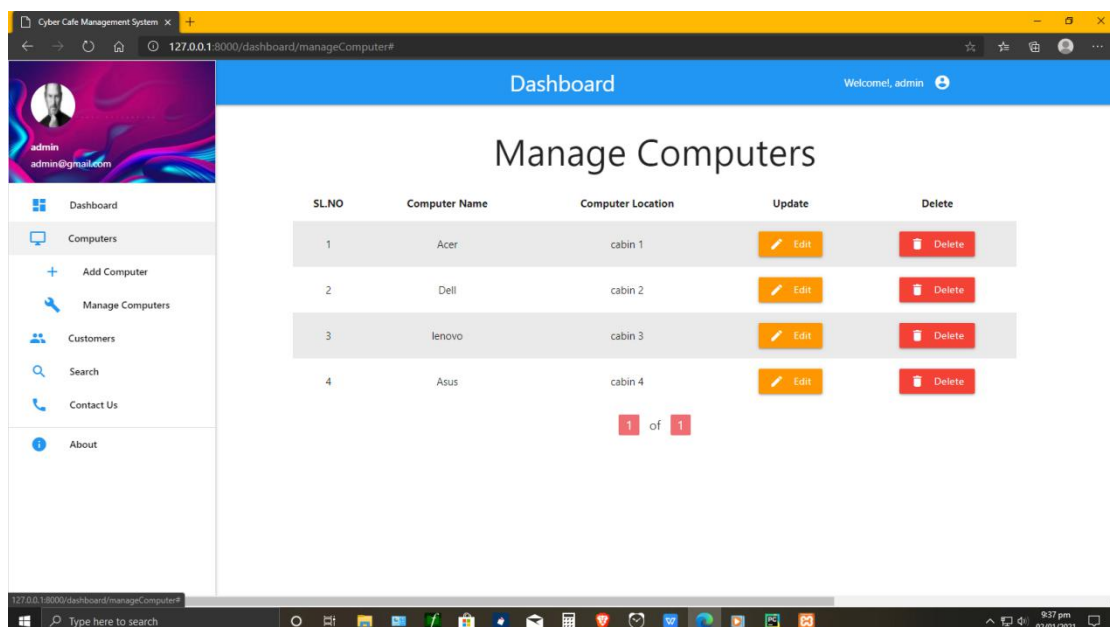
The screenshot shows the 'Add Customer' page of the Cyber Cafe Management System. The left sidebar contains navigation links: Dashboard, Computers, Customers, Add Customer, Checkout, View All Customers, Search, Contact Us, and About. The main content area has a form with the following fields:

- Name: Sanjay
- Address: Vidyanagar, Hassan - 573202
- Email: sanjay2001@gmail.com
- Telephone: 9845621304
- Available Computer: Acer, cabin 1
- Id Proof: 0

A green '+ ADD' button is located at the bottom right of the form.

Manage Computer

This page will allow admins to add/delete the computer's information, computer location and computer's name.



The screenshot shows the 'Manage Computers' page of the Cyber Cafe Management System. The left sidebar contains navigation links: Dashboard, Computers, Add Computer, Manage Computers, Customers, Search, Contact Us, and About. The main content area displays a table with the following data:

SL.NO	Computer Name	Computer Location	Update	Delete
1	Acer	cabin 1	Edit	Delete
2	Dell	cabin 2	Edit	Delete
3	lenovo	cabin 3	Edit	Delete
4	Asus	cabin 4	Edit	Delete

At the bottom of the table, there is a pagination indicator: 1 of 1.

Customer Section

Add Customer

This page is used to add the customer's information entering the cyber cafe. The information such customer's name, Address, Email, Phone number and Id Proof. The particular customer's cabin is also allocated in this page in Available Computer.

The screenshot shows the 'Add Customer' form in the Cyber Cafe Management System dashboard. The form is titled 'Add Customer' and is located on the right side of the dashboard. The left sidebar contains a menu with options: Dashboard, Computers, Customers, Add Customer, Checkout, View All Customers, Search, Contact Us, and About. The form fields are as follows:

- Name: Sanjay
- Address: Vidyanagar, Hassan - 573202
- Email: sanjay2001@gmail.com
- Telephone: 9845621304
- Available Computer: Acer, cabin 1
- Id Proof: (empty field)

A green '+ ADD' button is located at the bottom right of the form.

View All Customers

It stores information on all the customers entering the Cyber cafe and their details.

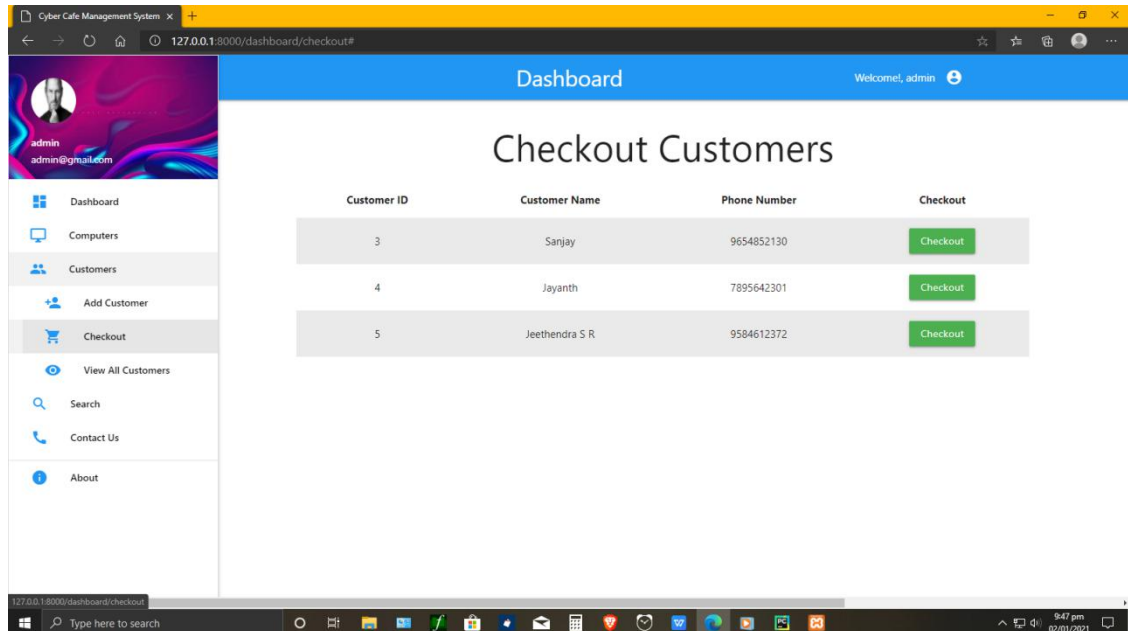
The screenshot shows the 'View All Customers' table in the Cyber Cafe Management System dashboard. The table is titled 'All Customers' and is located on the right side of the dashboard. The left sidebar contains a menu with options: Dashboard, Computers, Customers, Add Customer, Checkout, View All Customers, Search, Contact Us, and About. The table has the following columns: SL.NO, Customer ID, Customer Name, Phone Number, and Bill. The table contains 5 rows of customer data.

SL.NO	Customer ID	Customer Name	Phone Number	Bill
1	1	pranav	0123456789	View
2	2	shiv	98745542120	View
3	3	Sanjay	9654852130	View
4	4	Jayanth	7895642301	View
5	5	Jeethendra S R	9584612372	View

1 of 1

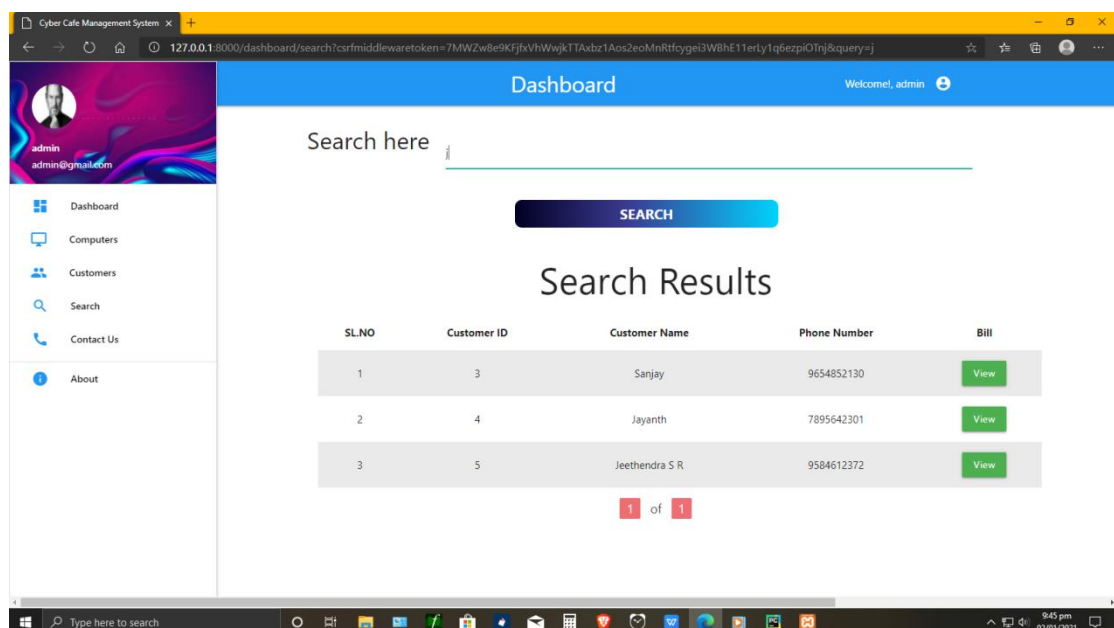
Checkout

In order to generate the bill of the customer, admin has to checkout for his out-time. Thus, generating a bill for the customer to pay.



Search

This page allows the admin to search for the customers and Report.



Profile info

This page let's admin to setup his/her profile. It includes admin's Username, First name, Lastname, Email to fill and update. Admin can also add his/her photo for display by choosing the path of the file.

Cyber Cafe Management System x

127.0.0.1:8000/dashboard/profile

Dashboard Welcomel, admin

Profile Info

admin
admin@gmail.com

Update Profile

Username
admin

First Name
Barry

Last Name
Allen

Email
admin@gmail.com

Choose File /media/profile_pics/stevejobs.jpg

UPDATE

First Name : Barry

Last Name : Allen

Email : admin@gmail.com

CONCLUSION

- Cyber Cafe management system provides the ease to the owner to distribute the customer to different terminals in best possible way and to know when the session is complete.
- Its major advantage is that it records the type of terminals accessed by the customers and full details of the customers are recorded in the database so that if any enquiry is needed by anyone later it can be systematically done.
- It works the admin front so user cannot manipulate or access any part of the information in the system.
- the time allotment is done very efficiently and it provides fast service in term of the bill calculation and time management.

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