MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Project Report

on

Online Messenger

Submitted By:

Akarshit Singh , 0901CS191011

Narayan Drolia, 0901CS191065

Faculty Mentor:

Dr. Ranjeet Kumar Singh

Assistant Professor CSE Department

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE

GWALIOR - 474005 (MP) est. 1957

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A project report submitted in partial fulfilment of the requirement for the degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

Submitted by:

Akarshit Singh 0901CS191011

Narayan Drolia 0901CS191065

Faculty Mentor:

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Submitted to:

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CERTIFICATE

This is certified that **Akarshit Singh (0901CS191011)** has submitted the project report titled **Online Messenger** under the mentorship of **Dr. Ranjeet Kumar Singh Assistant Professor ,CSE Department** in partial fulfilment of the requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.

R.K. Singh 9.5.22

Dr. Ranjeet Kumar Singh
Faculty Mentor
Assistant Professor
Computer Science and Engineering

09/5/22

Dr. Manish Dixit
Professor and Head
Computer Science and Engineering

Dr. Manish Dixit
Professor & Head
Department of CSE
M.I.T.S. Gwalior

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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CERTIFICATE

This is certified that **Narayan Drolia (0901CS191065)** has submitted the project report titled **Online Messenger** under the mentorship of **Dr. Ranjeet Kumar Singh, Assistant Professor, CSE Department** in partial fulfilment of the requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.

09.05.2022

Dr. Ranjeet Kumar Singh
Faculty Mentor
Assistant Professor
Computer Science and Engineering

09/5/22

Dr. Manish Dixit
Professor and Head,
Computer Science and Engineering

Dr. Manish Dixit
Professor & HOD
Department
M.I.T.S. Gwalior

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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DECLARATION

I hereby declare that the work being presented in this project report, for the partial fulfilment of requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Dr. Ranjeet Kumar Singh** Computer Science & Engineering.

I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.

Akarshit Singh
0901CS191011
3rd Year
Computer Science and Engineering

Narayan Dronia
0901cs191065
3rd Year
Computer Science and Engineering

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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I would sincerely like to thank my department, **Department of Computer Science and Engineering, for allowing** me to explore this project. I humbly thank **Dr. Manish Dixit**, Professor and Head, Department of Computer Science and Engineering, for his continued support during the course of this engagement, which eased the process and formalities involved.

I am sincerely thankful to my faculty mentors. I am grateful to the guidance of **Dr. Ranjeet Kumar Singh, Assistant Professor CSE Department for** his continued support and guidance throughout the project. I am also very thankful to the faculty and staff of the department.

Akarshit Singh
0901CS191011
3rd Year
Computer Science and Engineering

Narayan Drolia
0901CS191065
3rd Year
Computer Science Engineering

ABSTRACT

This project is developed to make an online chatting system. This system name is Chat System. This system may address point to point communication as well as multicast group message communication from one sender to many receivers. In this system first user need to go to our website then sign up through their unique details which would be asked by the system from the user, once the user signed up successfully, they will have to log in with their details and then they can create chat rooms to talk to their friend, family etc. After creating room, the users who wants to communicate through this chat room will have to sign up to our system as mentioned above and after signing up they'll have to log in to this system with their unique details and ten they will get the option there to join room which is created by other user to communicate and after joining that room successfully they can communicate with each other through text messages.

We've created this system by using Xampp server through which we got access to run our project successfully. Our project is developed in such a way that it is easy for user to understand the working of this system and enjoy the features of our system peacefully.

Keywords: Chat System, Xampp server.

सार:

ई-क ।छा क उर्जा थत और श ।णक ।वश्ल को ।खाडाव तो सं०ंकंांधत है। यह क ।म उर्जा क्रो आधार प छा क उर्जा थत उ पन्न करता है। यह उनक उर्जा थत को आधार प दानक बनाए रखा जाता है। छा क ! थत बनाने को ।लए कमचा र का एक अलग उपयोगकता नाम और पासवड दान किया जाएगा ।जसको ।लए का सं०ंभालने वाले कमचार। सभी छा क उर्जा थत को ।लए ।जिम्मेदार है। क्योंकि छा उस ।वशेष अवाध म ता करता है, तो उर्जा थत क गणना क जाएगी। सा ता।हक और मा।सक आधार प छा क उर्जा थत ।रपोट तयार क जाएगी। यह उनको प रणाम क ।रपोट, क ओ०ं क अनसार। और ।श क द्वारा छा को ।दए गए कायों का मा।सक ।रपोट भी दान करता है।

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CHAPTER 1 : INTRODUCTION

1.1 Overview

This report discusses the result of the work done in development of the "Online messenger" website on the platform. It is a kind of a chatting system where users can communicate through each other by logging on with their credentials and it's a project submission management project going in the Computer Science Department, Madhav Institute of Technology & Science, Gwalior.

1.2 Objective

The main objective of this project is to allow each and every person to get connected with each other. Some of the other objectives are listed below:

a) **Providing a social platform to users.**
b) **To allow each person to share their thoughts & views.**
c) **This system can be used as discussion board.**
d) **Connecting people together.**

1.3 Methodology

To implement the above goals, the following methodology needs to be followed:

1. Specifying the Application and various components of it.
2. Specifying the bindings between the tasks and the resources.
3. Tools.
4. Analysis: Extracting the data required for application.

1.4 Required Tool Description

Web applications can be developed across multiple IDE's and there are several plugins available for making the current IDE capable of writing the codes for websites. Out of several IDE's I have used the popular editor Visual Studio.

Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps. Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms, Windows Presentation Foundation, Windows Store and Microsoft Silverlight. It can produce both native code and managed code.

Visual Studio includes a code editor supporting IntelliSense (the code completion component) as well as code refactoring. The integrated debugger works both as a source-level debugger and a machine-level debugger. Other built-in tools include a code profiler, designer for building GUI applications, web designer, class designer, and database schema designer. It accepts plug-ins that expand the functionality at almost every level - including adding support for source control

systems (like Subversion and Git) and adding new toolset like editors and visual designers for domain-specific languages or toolsets for other aspects of the software development lifecycle (like the Azure DevOps client: Team Explorer).

1.5 Required Languages

1. **HTML** - The Hypertext Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser.

2. **CSS** - Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

3. **JavaScript** - JavaScript often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled and multi-paradigm. It has dynamic typing, prototype-based object-orientation, and first-class functions

4. **PHP** - PHP (Hypertext Preprocessor) is known as a general-purpose scripting language that can be used to develop dynamic and interactive websites.

5. **SQL** - SQL (Structured Query Language) is a standardized programming language that's used to manage relational databases and perform various operations on the data in them

1.6 Services

Services are the component in the system which runs in the background. Hence all the background tasks are done using the services component. This component is useful especially when a task is to be performed without impacting the user of its operation. This component does not provide any User Interface. For example, downloading the file from the internet or loading an image. All the Services that are created in the application have to inherit the services class provided by the Android Operating System.

1.7 Layouts

A layout defines the visual structure for an user interface, such as the UI for any activity. These files are responsible for defining the user Input. The user has the luxury of seeing how the designed layout will look like in the Graphical mode and they have the option of selecting the items that they desire to view layout.

CHAPTER 2: PROJECT REQUIREMENTS

2.1 System Requirements

1. Computers running Microsoft Windows must meet the following minimum Hardware and Software requirements.
2. **Software Requirements** – An OS, Text Editor, GUI for backend
3. **Hardware Requirements** – Laptop/Computer, Mobile device or Tablet
4. Microsoft Windows 7/8/10 (32- or 64- bit)
5. 3 GB RAM minimum, 8 GB RAM recommended; plus 1 GB for the Android Emulator

2.2 Functional Requirements

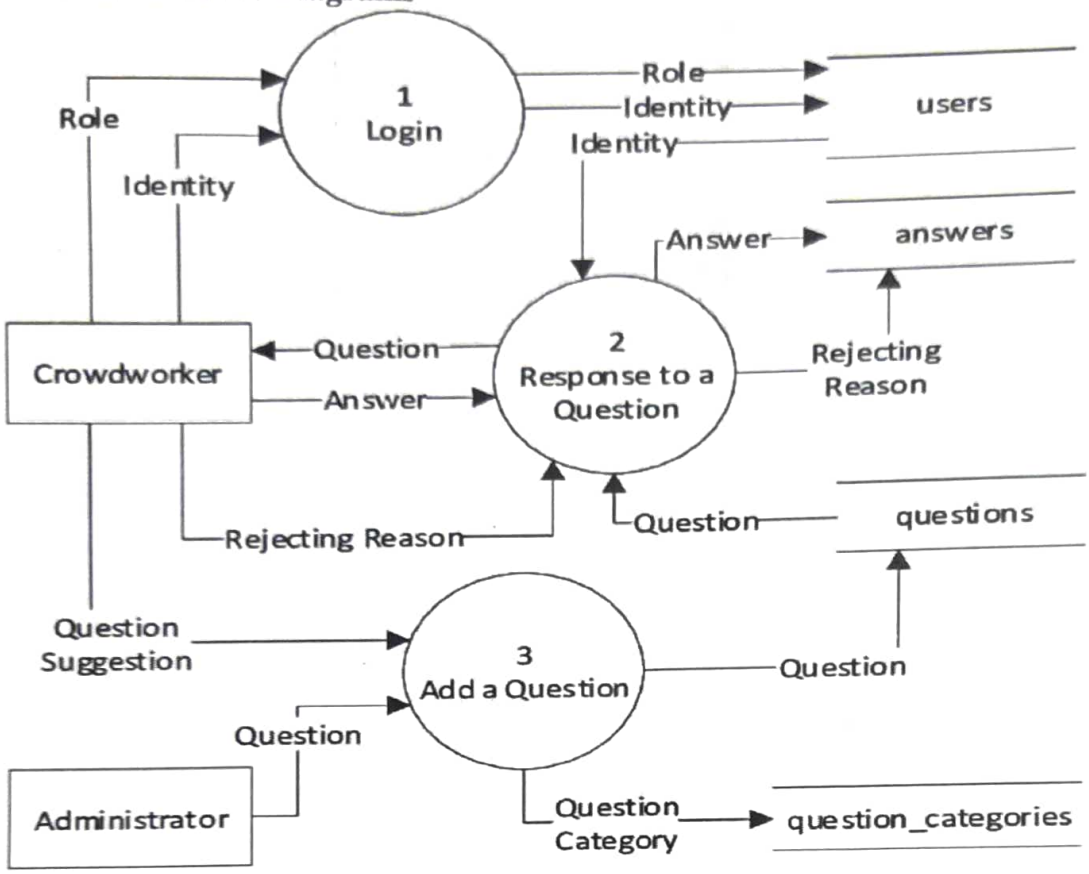
1. **Login for user:** If the user wants to login, they can login from the login page.
2. **Database:** All the information is stored in the database on the Xampp server.
3. **Logout:** Once the user has completed the task, they can logout of the website.

2.3 Non-Functional Requirements

1. **Portability:** Systems running on one platform can easily be converted to run on another platform.
2. **Reliability:** The ability of the system to behave consistently in a user-acceptable manner within the environment for which the system was intended.
3. **Availability:** The system should be available at all times, meaning the user can access it any time using a web browser, only restricted by the downtime of the server on which the website runs.
4. **Maintainability:** A commercial database is used for maintaining the database and the application server takes care of the site.
5. **Security:** Secure access of confidential data (customer details).
6. **User-friendly:** System should be easily used by the customer.
7. **Performance:** Performance should be fast.
8. **Safety:** Data in the database system should not be damaged.
9. **Privacy:** Personal information of the system should be taken care of.

CHAPTER 3 : PROJECT DIAGRAMS

3.1 Data Flow Diagrams



3.2 E-R Diagram

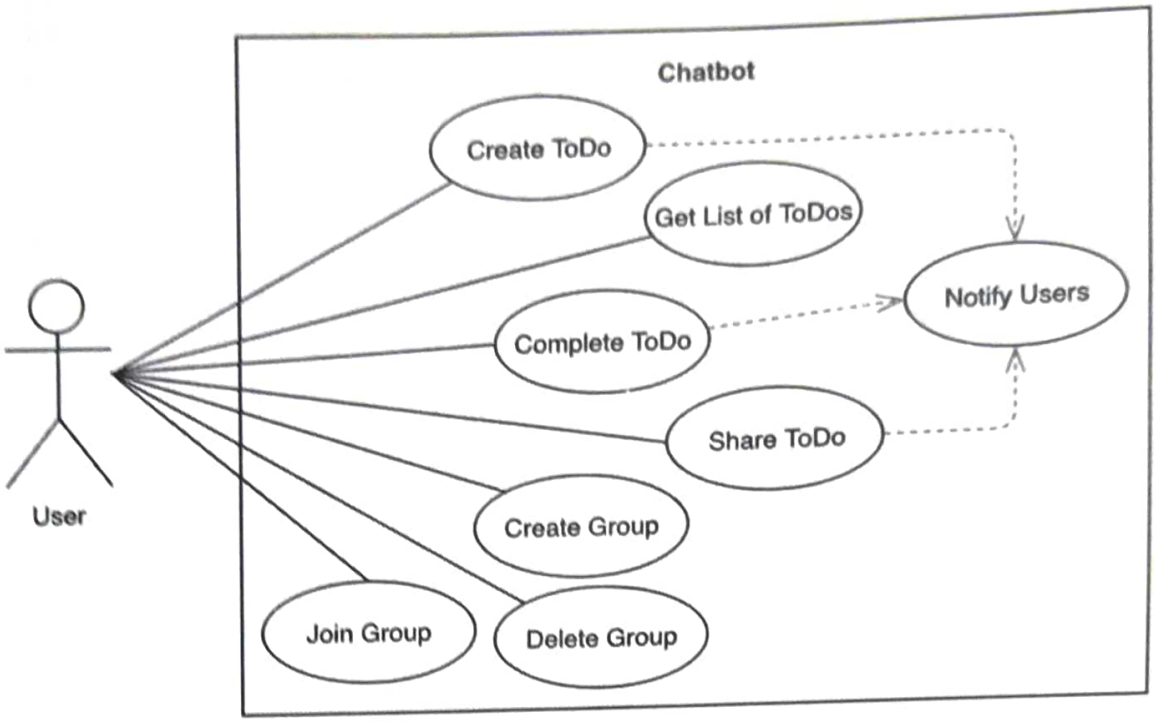


Fig 3.2 E-R Diagram

CHAPTER 4 : FINAL ANALYSIS AND DESIGN

4.1 Login Page

Before entering into the system (home page), the user must login, for this purpose the login page is created.
This log in form is made for security purpose i.e. only authenticated users have access into the system, i.e. either administrator or the user.

Fig 4.1 Login page

4.2 Chat room:

4.2.2 Chat room: This is created so that other user who wants communicate can join the room and express themselves through this system.

Fig 4.2 Chat room

4.3 Databases

We have used the database phpMyAdmin which runs on Xampp server where we have created different tables for storing the information of users, chat rooms etc.

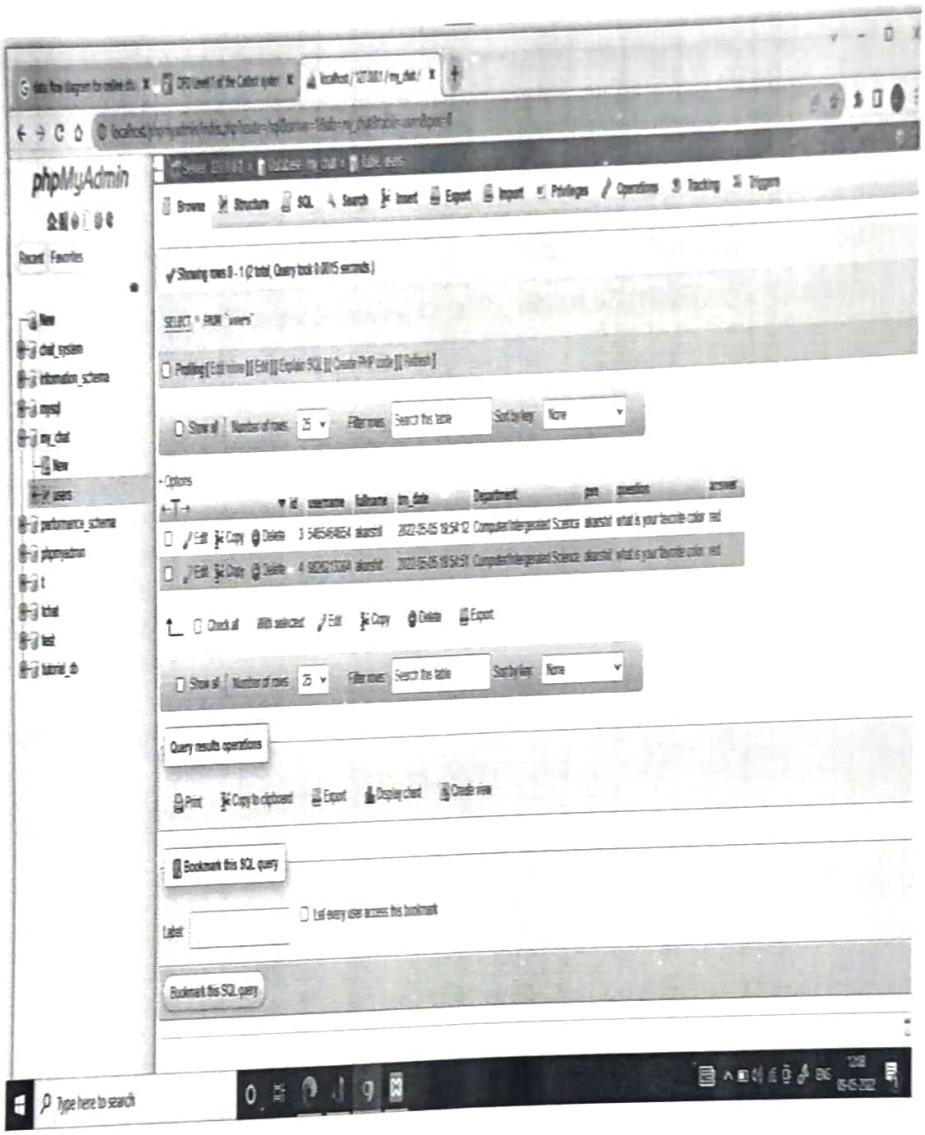


Fig 4.3 Database

CHAPTER 5: CONCLUSION AND FUTURE SCOPE

5.1 Conclusion

In this work, the web-based attendance management system is developed using PHP server-side scripting language and CSS, HTML, JavaScript for designing which fully meet the system's goals. This system overcomes many limitations incorporated in attendance, this system saves a great amount of time and reduces errors which may occur during attendance calculation. The system I have developed is fully responsive which can be used in mobile, tablets and different operating systems. Some other benefits are,

- Automated and web-based for easy accessibility
- It is a dynamic and flexible system
- It is very user friendly and handy
- The records of current and previous can be available in prompt and immediate.

5.2 Future work

We will make some future improvement in my project by making this online chatting system in order to make it more advanced and increase its reliability and effectiveness. Biometrics is an automated technique of identifying a person's behavioral or physiological characteristic.
A fingerprint scanner has two basic tasks which are,
i. It requires an image of a person's finger.
ii. It requires identifying and diagnosing whether the pattern of ridges and valleys in the current image matches the pattern of ridges and valleys of previous scanned images.

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