**Chat Application**

*A Minor Project Report*

*Submitted in partial fulfillment of the requirement*

*for the degree of*

**Bachelor of Technology**

**In**

**Computer Science and Engineering**

Jul-Dec 2021

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**Project Approval Sheet**

The project entitled “Chat Application” submitted by Yash Gupta, Payal Gandhwani and Mohd. Sameer Qureshi as partial fulfillment for the award of **Bachelor of Technology in Computer Science and Engineering** by Rajiv Gandhi Prodyogiki Vishwavidyalaya, Bhopal.

Project Coordinator

Prof. Shubham Sharma

Date:

I

**recommendation**

The project entitled “Chat Application” submitted by Yash Gupta, Payal Gandhwani and Mohd. Sameer Qureshi as partial is a satisfactory account of the bonafide work done under our guidance is recommended towards partial fulfillment for the award of the **Bachelor of Technology in Computer Science and Engineering** from Mahakal Institute of Technology, Ujjain by Rajiv Gandhi Prodyogiki Vishwavidyalaya, Bhopal.

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Date: Date:

Endorsed By

Head

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**ACKNOWLEDGEMENT**

It is with great reverence that we express our gratitude to our guide “**Prof. Sachin Malviya**” Department of Computer Science and Engineering, Mahakal Institute of Technology, Ujjain, (M.P.) for his/her precious guidance and help in this project work. The credit for the successful completion of this project goes to his/her keen interest timing guidance and valuable suggestion otherwise our endeavor would have been futile.

We sincerely thank “**Prof. Sachin Malviya**” for his guidance and encouragement in carrying out this project work.

We owe to regard to “**Prof. Abhishek Raghuvanshi**” Head of Department, Computer Science and Engineering for his persistent encouragement and blessing which were bestowed upon us.

We owe our sincere thanks to honorable Director **“Dr. Vivek Bansod”** for his kind support which he rendered us in the envisagement for great success of our project.

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**ABSTRACT**

The purpose of the chat application is to allow users be able to the chat with each other, like a normal chat application. The users will be able to chat with each other, most likely only from user to user, no group chatting will be developed, unless there is time to do so. The chat application will be written in Python. The project will be tested as the program is being developed. A database for the users registered will be developed and tested, a menu will be developed and tested, a client/server interface will be developed and tested, and GUI’s will be developed and tested, for the users’ benefits. When the chat application is near completion, more testing will be done in order to make it less buggy or more user friendly.

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**List of abbreviations**

|  |  |
| --- | --- |
| RF | Reliability Factor |
| …. | …… |
| …. | …… |
|  |  |
| DF | Data File |
| …. | …… |
| …. | …… |
| …. | …… |
| …. | …… |
| …. | …… |
| …. | …… |
| …. | …… |

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**CHAPTER 1**

**INTRODUCTION**

**1.1 Introduction**

The functionality of the chat application is to give the ability to chat with whoever is online on the application. The users and stakeholders will be a small group for now, The use cases will be what is available to the user, and the functional/nonfunctional requirements will be covered, as well as the milestones of the chat application. Chat Application is like WhatsApp but on Desktop. We are developing a GUI based Chat Application, which aims to provide an easy to use interface. All the registered users on the platform will be able to do a live chat. We will be using Websocket for server to client connection. For the database we will be using MySQL. Our chat application will be very useful for people who do not want to use their phone while using Desktop/Laptop. Since it's a very basic application it won’t support any type of file sharing system.

**1.2 Identification of Problem Domain**

* People were not able to communicate online with their friends/family properly.
* People were afraid of their privacy.
* People were afraid if someone could read their chat without their consent.
* There is no way to check if the other person is available or not.
* It is not feasible to call someone for small queries.

**Chapter 2**

**Literature Review**

* **2.1.1 Study of Whatsapp**

WhatsApp is a free to download messenger app for smartphones. WhatsApp uses the internet to send messages, images, audio or video. The service is very similar to text messaging services.

Feature:

WhatsApp Payments

Disappearing Messages

Calls

Group Calls

Limitations:

You can’t share large files on WhatsApp.

There is no option to hide from particular users.

There is a risk of anyone reading the message meant for you only.

You need to share the number with people with whom you would like to communicate.

* **2.1.2 Study of Telegram**

Telegram is a free and open source, cross-platform, cloud-based instant messaging software. This service also provides end-to-end encrypted video calling, VoIP, file sharing and several other features.

Feature:

Secret Chat  
Telegram Bots

Mute Contacts/Groups

Video/Voice Calls/Group Calls

Limitations:

We can not know the status of our Contacts.

We can not send multiple files at a time.

Messages outside secret chats are not End to End Encrypted.

* **2.1.3 Study of Snapchat**

Snapchat is a mobile app that allows users to send and receive "self-destructing" photos and videos. Photos and videos taken with the app are called snaps.

Feature:

Take Pictures with lenses and Filters

Upload Stories

Disappearing Chat

We can know if someone took screenshot

Limitations:

The audience of Snapchat is rather limited.

Stories on Snapchat are available for a limited time.

Content length is short.

* **2.1.4 Study of Discord**

Discord is a VoIP, instant messaging and digital distribution platform. Users communicate with voice calls, video calls, text messaging, media and files in private chats or as part of communities called "servers".

Features:

Screen Sharing

Voice Calls

Servers for easy Management

Limitations:

User limits

Video chat

Safety in large servers

* **2.1.5 Study of Facebook Messenger**

Facebook Messenger is a FREE mobile messaging app used for instant messaging, sharing photos, videos, audio recordings and for group chats

Features:

Instant Messaging

Photo/Videos sharing

Ability to record voice messages

Limitations:

Drains Battery

Takes a lot of storage

Difficult to completely protect our privacy