

# **A Project Report**

**On**

***ONLINE CHATTING***



**Submitted By**  
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Class: ~ XII C

**Under the Guidance of**

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## **CERTIFICATE**

This is to certify that SHUBHAM YADAV  
Of Class XII C has prepared the report on the  
Project entitled “Online Chatting”. The report is  
the result of his efforts & endeavors. The report  
is found worthy of acceptance as final project  
report for the subject Computer Science of  
Class XII. He has prepared the report under my  
guidance.

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**CER T I F I C A T E**

The project report entitled  
“ONLINE CHATTING”,

Submitted by SHUBHAM YADAV of Class XII C for the  
CBSE Senior Secondary Examination class XII of  
Computer Science at Kendriya Vidyalaya No. 2, Delhi  
Cantt has been examined.

***SIGNATURE OF EXAMINER***

## DECLARATION

I hereby declare that the project work entitled “ONLINE CHATTING”, submitted to Department of Computer Science, Kendriya Vidyalaya No. 2, Delhi Cantt, New Delhi is prepared by me. All the coding are result of my personal efforts.

SHUBHAM YADAV  
Class XII C

# ACKNOWLEDGEMENT

I would like to express a deep sense of thanks & gratitude to my project guide Mr. Sanwar Mal Sir for guiding me immensely through the course of the project. He always evinced keen interest in my work. His constructive advice & constant motivation have been responsible for the successful completion of this project.

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SHUBHAM YADAV

Class: XII C

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# **HARDWARE AND SOFTWARE USED**

## **HARDWARE**

*Monitor*

*Ram*

*Hard Disk*

*Keyboard*

*Mouse*

*Microprocessor*

*SMPS*

## **SOFTWARE**

*Dev C++*

*MySQL 8.0*

*Google Chrome*

*Windows 10*

*PhpMyAdmin*

*Notepad*

*MS Word*

## **ABOUT PROJECT**

This is a simple menu driven program which lets you send message to other users in real time. It uses embedded DML MySQL commands to connect to MySQL database. This program is capable of signup, login, sending message, receiving message, viewing other users profile, viewing your own profile, changing password, logout and deleting your account.



## **HEADER FILES USED**

- *iostream*
- *stdio.h*
- *stdlib.h*
- *windows.h*
- *conio.h*
- *string*
- *process.h*
- *ctime*
- *fstream*
- *mysql.h*
- *mysql\_error.h*

# **FUNCTIONS USED**

## ***LIBRARY FUNCTIONS***

*system("cls")*  
*while()*  
*mysql\_init()*  
*getch()*  
*exit()*  
*mysql\_real\_connect()*  
*if() else*  
*keybd\_event()*  
*mysql\_error()*  
*switch()*  
*mysql\_close()*  
*for()*  
*getline()*  
*cin.ignore()*  
*itoa()*  
*strcpy()*  
*mysql\_query()*  
*mysql\_store\_result()*  
*mysql\_fetch\_row()*  
*ctime()*

## ***USER DEFINED FUNCTIONS***

*cin\_pass()*  
*is\_empty()*  
*database\_connect()*  
*fullscreen()*  
*choice()*  
*check()*  
*front\_page()*  
*signup()*  
*login()*  
*u\_choice()*  
*search()*  
*profile()*  
*f\_profile()*  
*message()*  
*logout()*  
*acc\_delete()*  
*pass\_change()*  
*home\_page()*  
*main()*

# MYSQL

**Server:** db4free.net

**Name:** online\_chatting

**Username:** shubhamamsa

**Password:** 100miles

**Port number:** 3306

**Database:** online\_chatting

**Tables:**

## USERS

Field	Type	Null	Key	Default	Extra
user_id	smallint(6)	NO	PRI	NULL	auto_increment
f_name	varchar(40)	NO		NULL	
l_name	varchar(40)	NO		NULL	
dob	date	NO		NULL	
email	varchar(50)	NO	UNI	NULL	
username	varchar(40)	NO	UNI	NULL	
pass	char(40)	NO		NULL	
r_date	datetime	NO		NULL	

## MSG

Field	Type	Null	Key	Default	Extra
uid	varchar(80)	NO		NULL	
f_name	varchar(40)	NO		NULL	
message	text	NO		NULL	

## **WORKING DESCRIPTION**

This program is designed to keep the records of users.

This program consists of majorly 3 options as follows

1. TO SIGNUP
2. TO LOGIN:~
  - a) SEND MESSAGE
  - b) SEARCH PROFILE
  - c) GO TO YOUR PROFILE
  - d) LOGOUT
3. EXIT

# CODING

```
#include<iostream>
#include<stdio.h>
#include<stdlib.h>
#include<windows.h>
#include<conio.h>
#include<string>
#include<process.h>
#include<ctime>
#include<fstream>
#include<C:\Program Files\MySQL\MySQL Server 8.0\include\mysql.h>
#include<C:\Program Files\MySQL\MySQL Server
8.0\include\mysqld_error.h>

using namespace std;

MYSQL *obj;
MYSQL_RES *result = new MYSQL_RES;
MYSQL_ROW row;
string query_s;
char query[1000];
int execute;

void fullscreen();

string cin_pass();

int is_empty(string);

class online_chatting {
private:
    void database_connect();
    int choice(int ch);
protected:
    string f_name;
    string l_name;
    string username;
    string email;
    string password;
    string r_date;
    string _dob;
    struct dob {
        int year;
        int month;
        int date;
```

[illegible]

```

        getch();
        exit(0);
    }
    if(!mysql_real_connect(obj, "db4free.net", "shubhamamsa", "100miles",
        "online_chatting", 3306, NULL, 0)) {
        cout<<"It seems your network is down or database server is
        not working."<<mysql_error(obj);
        cout<<"\n\nPress any key to exit...";
        getch();
        exit(0);
    }
}

int online_chatting::check(dob inp)    {

    if(inp.year>2019 || inp.month<1 || inp.month>12 || inp.date<1)
    {
        cout<<"\t\t\tSorry invalid date of birth... Enter again\n";
        return 0;
    }
    if(inp.month==2)
    {
        if((inp.year%4==0 && inp.date>29) || (inp.year%4!=0 &&
            inp.date>28))
        {
            cout<<"\t\t\tSorry invalid date of birth... Enter
            again\n";
            return 0;
        }
    }
    if((inp.month==1 || inp.month==3 || inp.month==5 || inp.month==7
        || inp.month == 8 || inp.month == 10 || inp.month == 12) &&
        inp.date>31)
    {
        cout<<"\t\t\tSorry invalid date of birth... Enter again\n";
        return 0;
    }
    if((inp.month==4 || inp.month==6 || inp.month==9 ||
        inp.month==11) && inp.date>30)
    {
        cout<<"\t\t\tSorry invalid date of birth... Enter again\n";
        return 0;
    }
    return 1;
}

int online_chatting::choice(int ch)    {
    switch(ch) {
        case 0:
            system("cls");
            cout<<"Exiting...";
            mysql_close(obj);
            exit(0);

```

```

        case 1:
            if(login()==1)
                return 0;
            break;
        case 2:
            signup();
            break;
        default:
            cout<<"\n\t\t\t\t\t\t\t\t\t\t Sorry wrong choice
selected... Enter again.";
            getch();
            break;
    }
    return 1;
}

void online_chatting::signup() {
    int a=2;
    do {
        system("cls");
        cout<<"\n\n\t\t\t\t\t\t\t\t\t\t SIGN UP\n\n\t\t\t\t\t";
        for(int i=0;i<59;i++)
            cout<<"==";
        cin.ignore();
        do {
            cout<<"\n\n\t\t\t\t\tEnter your first name: ";
            getline(cin, f_name);
            if(is_empty(f_name))
                cout<<"\t\t\t\tField cannot be blank.";
        }while(is_empty(f_name));
        do {
            cout<<"\n\n\t\t\t\t\tEnter your last name: ";
            getline(cin, l_name);
            if(is_empty(l_name))
                cout<<"\t\t\t\tField cannot be blank.";
        }while(is_empty(l_name));
        do {
            cout<<"\n\n\t\t\t\t\tEnter date of birth: \n\t\t\t\t\tEnter
year (in YYYY): ";
            cin>>inp.year;
            cout<<"\t\t\t\t\tEnter month (in MM): ";
            cin>>inp.month;
            cout<<"\t\t\t\t\tEnter date (in DD): ";
            cin>>inp.date;
        }while(check(inp)==0);
        cin.ignore();
        do {
            cout<<"\n\n\t\t\t\t\tEnter your email: ";
            getline(cin, email);
            if(is_empty(email))
                cout<<"\t\t\t\tField cannot be blank.";
        }while(is_empty(email));
        do {

```



[illegible]

```
cout<<"\n\n\t\tEnter your password: ";
password = cin_pass();
if(is_empty(password))
    cout<<"\n\t\tField cannot be blank.";
}while(is_empty(password));
query_s = "SELECT * FROM users where username='"+username+"'";
strcpy(query, query_s.c_str());
execute = mysql_query(obj, query);
if(execute)
{
    cout<<"\n\n\t\tAn error occured
MySQL("<mysql_error(obj)<")";
    getch();
    return 0;
}
result = mysql_store_result(obj);
row=mysql_fetch_row(result);
if(row==NULL)
{
    cout<<"\n\n\t\tUsername not found...";
    getch();
    return 0;
}
if((row[6]!=password))
{
    cout<<"\n\n\t\tWrong username and password";
    getch();
    return 0;
}
f_name=row[1];
l_name=row[2];
_dob=row[3];
email=row[4];
r_date=row[7];
return 1;
}

void user::home_page()
{
time_t now = time(0);
char* dt = ctime(&now);
int ch;
do
{
system("cls");
cout<<"\n\n\t\t\t\t\tHOME PAGE\n\n\t\t\t\t";
for(int i=0;i<59;i++)
    cout<<"==">
    cout<<"\n\n\t\t\t Welcome, "<<f_name<<"\t\t\t\t\t";
    <<dt<<"\t\t\t";
for(int i=0;i<59;i++)
    cout<<"==">
    cout<<"\n\n\n\n\n\t\t\t\t\t1. Send
Message\n\n\n\n\t\t\t\t\t2. Search Profile\n\n\n\n\t\t\t\t\t3.
Go to your Profile\n\n\n\n\t\t\t\t\t4. Logout";
cout<<"\n\n\n\n\n\t\t\t\t\tEnter your choice: ";
cin>>ch;
u_choice(ch);
```

```

        }while(1);
    }

void user::u_choice(int ch) {
    switch(ch)
    {
        case 1:
            message();
            break;
        case 2:
            f_profile();
            break;
        case 3:
            profile();
            break;
        case 4:
            logout();
            break;
        default:
            cout<<"You have entered wrong choice... Enter again.";
            getch();
            break;
    }
}

int user::search()    {

    system("cls");
    string usr;
    cin.ignore();
    cout<<"\n\t\tEnter username to search: ";
    getline(cin, usr);
    query_s = "SELECT * FROM users where username = '"+usr+"'";
    strcpy(query, query_s.c_str());
    execute = mysql_query(obj, query);
    if(execute)    {
        cout<<"\n\t\tUh Oh! Some error occurred
        MYSQL("<mysql_error(obj)<")";
        getch();
        return 0;
    }
    result = mysql_store_result(obj);
    row = mysql_fetch_row(result);
    if(row == NULL)    {
        cout<<"\n\t\tNo user found with this username.";
        getch();
        return 0;
    }
    return 1;
}

void user::f_profile()    {

```

[illegible]

```

        cout<<"_";
        cout<<"\n\n\n\n\n\n\n\t\t\t\t\t Name: "<<f_name<<" "<<l_name;
        cout<<"\n\n\n\n\t\t\t\t\t Email: "<<email;
        cout<<"\n\n\n\n\t\t\t\t\t Username: "<<username;
        cout<<"\n\n\n\n\t\t\t\t\t Date of Birth: "<<_dob;
        cout<<"\n\n\n\n\t\t\t\t\t Registration Date: "<<r_date;
        cout<<"\n\n\n\n\n\n\n\n\n\t\t\t\t\t 1. HOMEPAGE\t|\t 2. CHANGE
        PASSWORD\t|\t 3. DELETE YOUR ACCOUNT";
        cout<<"\n\n\n\t\t\t\t\t Enter your choice: ";
        cin>>a;
        switch(a) {
            case 1:
                return;
            case 2:
                pass_change();
                break;
            case 3:
                acc_delete();
                break;
            default:
                cout<<"Wrong input enter again";
                getch();
                break;
        }
    }while(a>3||a<1);
}

void user::pass_change() {

    system("cls");
    string pass;
    cout<<"\n\n\n\t\t\t Enter your current password: ";
    cin.ignore();
    pass = cin_pass();
    if(pass != password) {
        cout<<"\n\n\t\t\t Sorry wrong password";
        getch();
        return;
    }
    cout<<"\n\n\n\t\t\t Enter new password: ";
    pass = cin_pass();
    query_s = "UPDATE users set pass = '"+pass+"'";
    strcpy(query, query_s.c_str());
    execute = mysql_query(obj, query);
    if(!execute) {
        cout<<"\n\n\t\t\t Password changed... Login again";
        getch();
        front_page();
    }
    else {
        cout<<"\n\n\t\t\t An error occurred
        MYSQL("<<mysql_error(obj)<<")";
    }
}

```

[illegible]

```
execute = mysql_query(obj, query);
if(!execute) {

    result = mysql_store_result(obj);
    while(row = mysql_fetch_row(result)) {

        if(row == NULL) {
            cout<<"\n\n\n\t\t\t\t\t\t\t\t\t\tNo
            messages yet.";
            getch();
            break;
        }
        cout<<"\n\n\t\t\t\t\t\t"<<row[0]<<":
        "<<row[1]<<endl<<endl;
    }
    cout<<"\n\t\t\t\t\t\t";
    for(int i=0;i<50;i++)
        cout<<"__";
    cout<<"\n\n\t\t\t\t\t\t";
    cout<<"1. Refresh \t\t\t\t\t 2. Reply \t\t\t\t\t 3. Home Page";
    cout<<"\n\n\t\t\t\t\t\t";
    cout<<"Enter your choice: ";
    cin>>ch;
    switch(ch) {
        case 1:
            break;
        case 2:
            cin.ignore();
            do {
                cout<<"\n\n\t\t\t\t\t\t";
                cout<<"Enter message: ";
                getline(cin, msg);
                if(is_empty(msg))
                    cout<<"\t\t\t\t\t\tSorry blank message is not
                    allowed.";
            }while(is_empty(msg));
            query_s = "INSERT INTO msg
            values('"+username+usr+"','"+f_name+"','"+msg+"' )";
            strcpy(query, query_s.c_str());
            execute = mysql_query(obj, query);
            if(execute) {
                cout<<"\n\t\t\t\t\t\t\t\t\t\tSorry an error occurred
                MYSQL("<<mysql_error<<");
            }
            break;
        case 3:
            home_page();
        default:
            cout<<"\n\n\t\t\t\t\t\t";
            cout<<"Sorry wrong input enter again";
            getch();
            break;
    }
}
```

```

    }
}
else {
    cout<<"\n\t\t\t\t\tSorry an error occurred\n";
    MYSQL("<mysql_error(obj)<<") ";
    return;
}
}while(ch==1 || ch == 2);
}

void fullscreen() {
keybd_event(VK_MENU,0x38,0,0);
keybd_event(VK_RETURN,0x1c,0,0);
keybd_event(VK_RETURN,0x1c,KEYEVENTF_KEYUP,0);
keybd_event(VK_MENU,0x38,KEYEVENTF_KEYUP,0);
}

string cin_pass() {

    char ch, pass[40];
    string password;
    int i=0;
    while(ch!=13)
    {
        ch=getch();
        if(ch!=8)
        {
            pass[i]=ch;
            i++;
        }
        else if(ch==8)
            if(i>0)
                i--;
    }
    pass[i-1]='\0';
    password = pass;
    return password;
}

int is_empty(string ch) {

    if(ch=="")
        return 1;
    else
        return 0;
}

```



# OUTPUT SCREENS

WELCOME TO, ONLINE CHATTING

1. LOGIN | 2. SIGN UP

(Press 0 to exit)

Enter your choice: \_\_\_\_\_

SIGN UP

Enter your first name: Dinesh

Enter your last name: Rewaria

Enter date of birth:

Enter year (in YYYY): 2000

Enter month (in MM): 10

Enter date (in DD): 19

Enter your email: dineshrewaria@gmail.com

Enter your username: dainu

Enter your password:

Successfully registered... Please login to continue\_

## LOGIN

Enter your username: dainu

Enter your password: \_

## HOME PAGE

Welcome, Dinesh

Sun Feb 03 16:07:00 2019

1. Send Message
2. Search Profile
3. Go to your Profile
4. Logout

Enter your choice: \_

Enter username to search: shubhamamsa\_

shubhamamsa

Dinesh: Hello

Dinesh: How are you

Shubham: I am fine. What about you?

Dinesh: Me too

1. Refresh

2. Reply

3. Home Page

Enter your choice: 2

Enter message: How are your exams going?

### Shubham's Profile

---

Name: Shubham Yadav

Email: shubhamyadav2002@gmail.com

Username: shubhamamsa

Date of Birth: 2000-10-01

Registration Date: 2019-01-29

1. MESSAGE

|

2. GO TO HOMEPAGE

Enter your choice:

### Your Profile

---

Name: Dinesh Rewaria

Email: dineshrewaria@gmail.com

Username: dainu

Date of Birth: 2000-10-19

Registration Date: 2019-02-03

1. HOMEPAGE

|

2. CHANGE PASSWORD

|

3. DELETE YOUR ACCOUNT

Enter your choice:

Enter your current password:  
Enter new password:  
Password changed... Login again

ALL YOUR DATA WILL BE DELETED! DO YOU WANT TO DELETE YOUR ACCOUNT(Y/N):

ACCOUNT DELETED SUCCESSFULLY\_

HOME PAGE

=====

Welcome, Shubham

=====

Sun Feb 03 16:09:19 2019

1. Send Message
2. Search Profile
3. Go to your Profile
4. Logout

Enter your choice: 4

Do you want to logout(Y/N): Y

```
Exiting...
-----
Process exited after 176.8 seconds with return value 0
Press any key to continue . . .
```

## BIBLIOGRAPHY

- 1 <https://www.google.com/>
- 2 <https://stackoverflow.com/>
- 3 <https://www.tutorialspoint.com/>
- 4 <https://www.youtube.com/>
- 5 Computer Science with C++ by Sumita Arora