PROJECT REPORT

On

Login Authentication System (using C language)

Submitted to Centurion University of Technology& Management
in partial fulfillment of the requirement for award of the degree of

B. TECH.

in

COMPUTER SCIENCE & ENGINEERING

Submitted By

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Under the Guidance of

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CERTIFICATE

This is to be certified that the minor project entitled "**Login Authentication System**" has been submitted for the Bachelor of Technology in Computer Science Engineering of School of Engineering & Technology, CUTM, Paralakhemundi during the academic year 2021-2022 is a persuasive piece of project work carried out by "**VICKY KUMAR(210101120004), Shubham kumar(210101120017) and Manish kumar(210101120013)**" towards the partial fulfillment for award of the degree (B.Tech.) under the guidance of "Dr. Debendra Maharana" and no part thereof has been submitted by them for any degree to the best of my knowledge.

Signature of HOD
Dr. Debendra Maharana

Signature of Project Guide
Dr. Debendra Maharana

EVALUATION SHEET

1. Title of the Project: Login Authentication System
2. Year of submission: 2022
3. Name of the degree: B-Tech
4. Date of Examination / Viva: 15th JULY 2022
5. Student Name with Reg No.:

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9. Name of the Guide: **Dr. Debendra Maharana**
10. Result:

[APPROVED/REJECTED]

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Dr. Debendra Maharana

Signature of Project Guide
Dr. Debendra Maharana

Signature of External Examiner

CANDIDATE'S DECLARATION

We "**VICKY KUMAR (210101120004), Shubham kumar (210101120017), Manish kumar (210101120013)**", B-Tech in CSE (Semester- II) of School of Engineering &Technology, CUTM, Paralakhemundi, hereby declare that the Project Report entitled "Authentication System" is an original work and data provided in the study is authentic one. This report has not been submitted to any other Institute for the award of any other degree by me.

Signature of Student

ACKNOWLEDGEMENT

I would like to thank my teacher Dr. Debendra Maharana who gave me this opportunity to work on this project. I got to learn a lot from this project about Login Authentication System.

I would also like to thank our Branch H.O.D Debendra Maharana

At last, I would like to extend my heartfelt thanks to my parents because without their help this project would not have been successful. Finally, I would like to thank my dear friends who have been with me all the time.

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Authentication System

Fig1

Fig2

INDEX:

Introduction: -

Authentication is a process to access to login account and accessing the service provided by the system or server using the password. It also has an alternative way to authenticate the user which is using biometric authentication by using fingerprint or iris recognition. However, human has the tendency to create easily remember password which it will lead to a problem.

With the rapid evolution of the wireless communication technology, user authentication is important in order to ensure the security of the wireless communication technology. Password play an important role in the process of authentication. In the process of authentication, the password enter by the user will be transmitted along the traffic to the authentication server in order to allow the server to grant access to the authorized user. Due to the issues, there are many solutions has been proposed to improve the security of wireless communication technology. In this paper, the previously proposed solution will be used to enhance the security of the system. The solution adopted is the password checking, hashing and two-factor authentication. We can improve this project by adding one-time password and new solution will be added by using the QR code to help to save more data. The objective of the system outcome is to enhance the current login authentication system. It provides solutions for making password breaking more difficult as well as convinces users to choose and set hard-to-break passwords.

According to Pagliery(2014), there is 47% of the American adults account been hacked in that year. Their personal information is exposed by the hackers. Due to the problem exists, there are more people no longer trust that password will be able to protect their online account. According to Sulleyman(2017), some of the attackers will sell the email account that is been hacked to others to gain profit. It is important to protect our own account because our credit is priceless. It is hard to trace the attackers in the cyber world. The secure login system is needed to ensure the cybersafety. Therefore, this project would like to provide alternative ways to log in to a system because current login system is not secure enough.

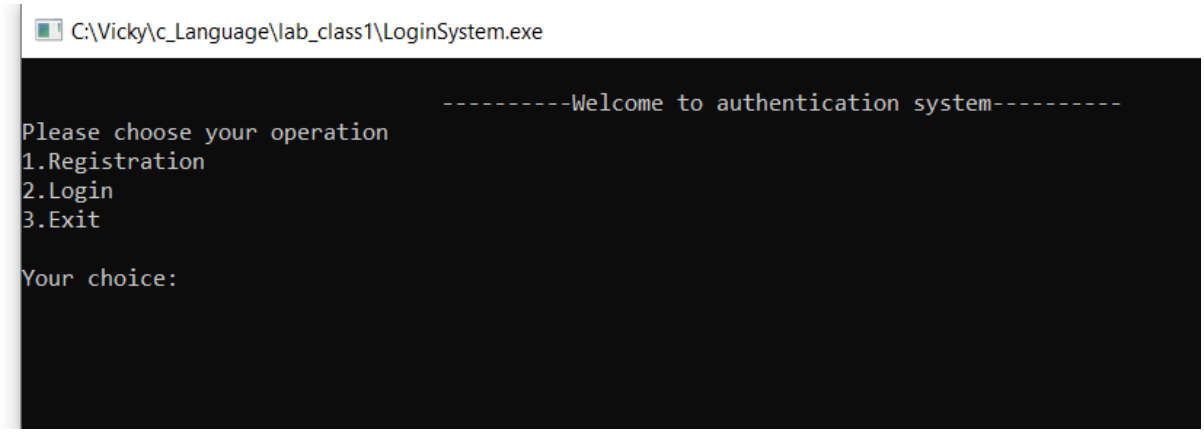
Proposed methodology/Algorithm: -

When user run this program, he gets an output interface (fig3) in which have 3 options users have to select any one within this these are:

1.Register- For register a new data

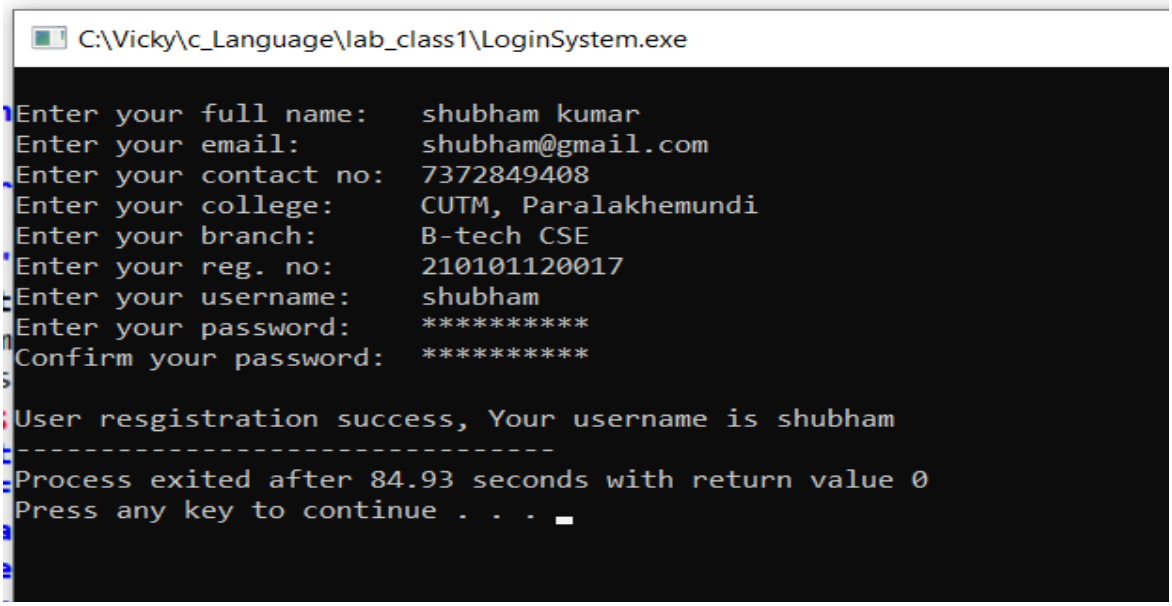
2.Login-for view about exist data

3.Exit- stop the program



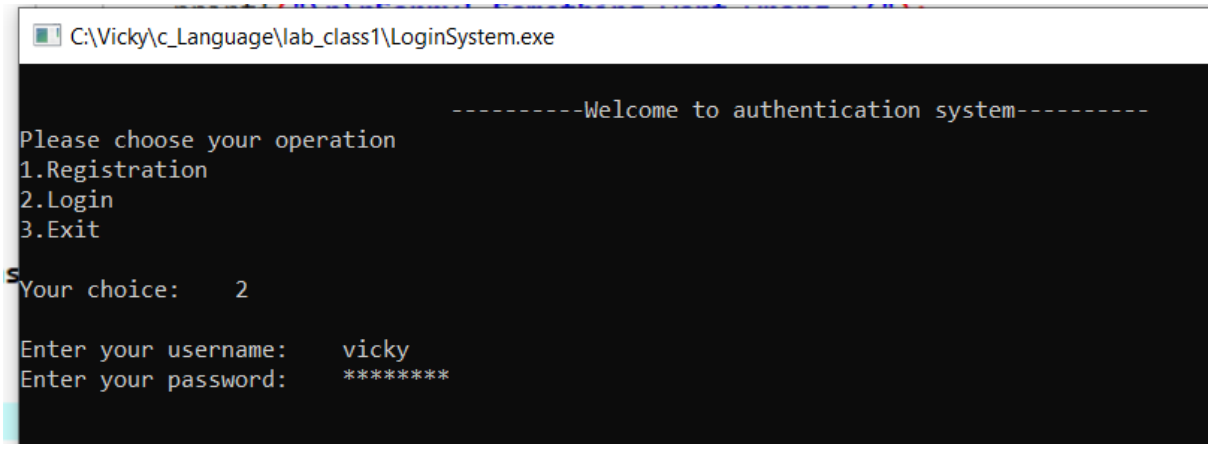
If choice 1: -

i. Program ask for some details.
ii. User have to fill this
iii. Program ask password to time if both same then user detail will be saved.

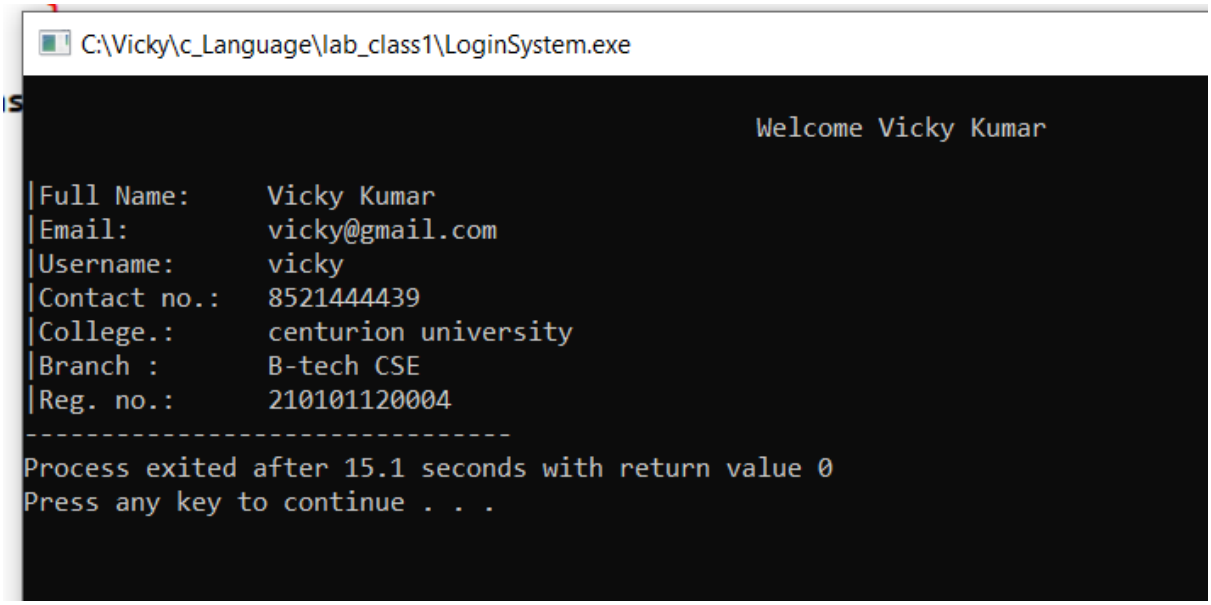


If choice 2: -

i. Program ask for username and password



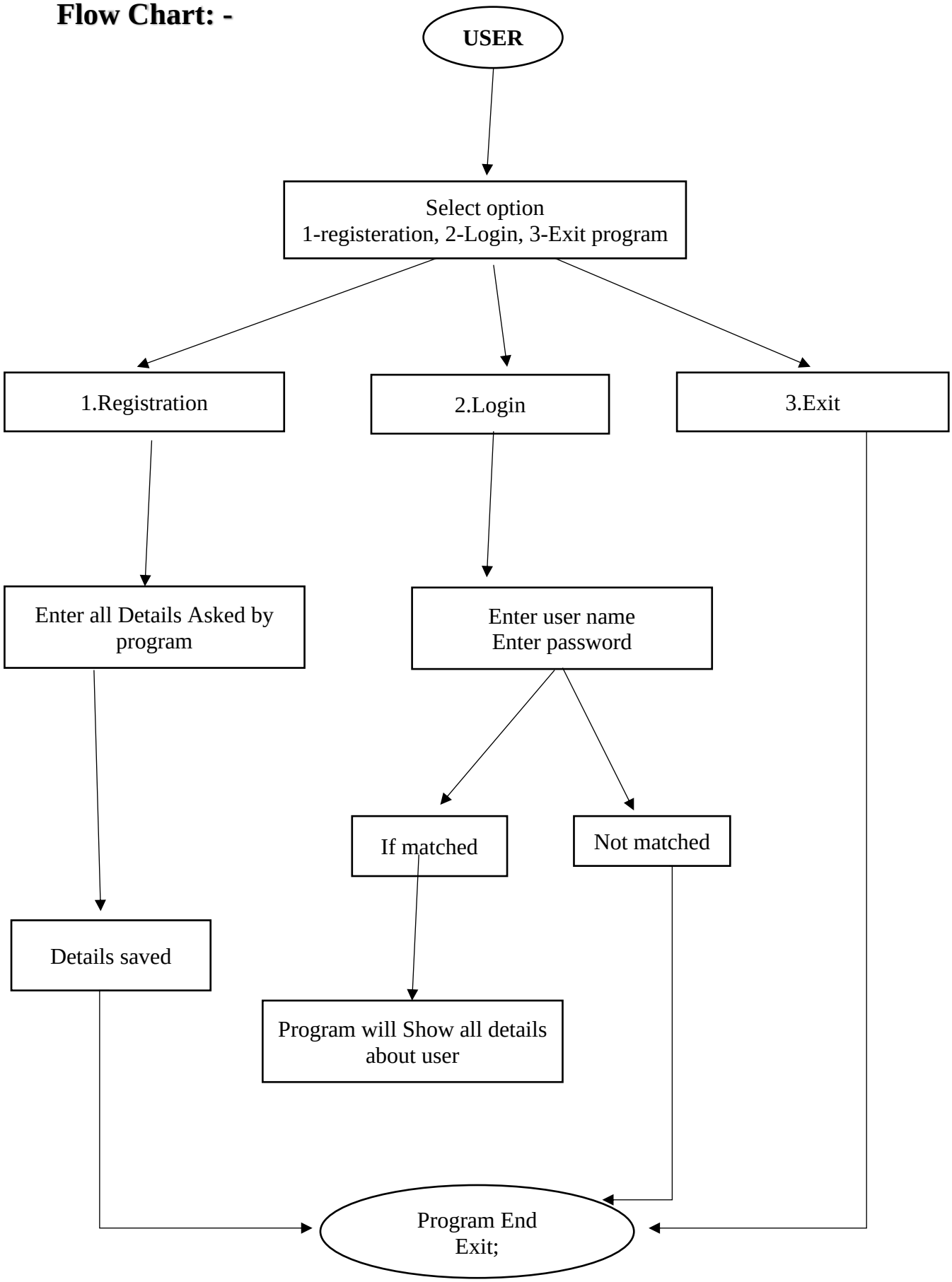
ii. If username exist in data file and password matched to respective username it shows user details otherwise exit from program.



If choice 3: -

i. Simply stop the program.

Flow Chart: -


USER
Select option
1-registeration, 2-Login, 3-Exit program
1.Registration
2.Login
3.Exit
Enter all Details Asked by program
Enter user name
Enter password
If matched
Not matched
Details saved
Program will Show all details about user
Program End
Exit;

Functions use in this program: -

Here some Functions that are used to make this program
User defined function

i. takepassword (): - it is a user define function that take the password safely and store in give variable address.

Standard library function: -

1) main()-from here the code start execute
2) printf() – to print the data to screen and in file
3) scanf()- for scan the input and store in given variable
4) while() -this looping some block of codes
5) if else() – there are some given condition if condition are true inside the if block will be execute otherwise else block will be execute.
6) switch(case)-it is a case check statement it run respective case labels.
7) fgetc()- simply getting a character from file pointer
8) gets()-getting the string from user
9) strlen()-giving length of string.
10) sizeof()-give the size

Here some header file and datatype keyword are alsoused
#include <stdio.h>
Datatype:- int, char, File pointer

Implementation: -

```
#include <stdio.h>

#define ENTER 13

#define TAB 9

#define BCKSPC 8

struct user{

	char fullName[50];

	char email[50];

	char password[50];

	char username[50];

	char phone[50];

	char college[50];

	char branch[50];

	char regno[50];

}usr;

void takepassword(char pwd[50]){

	int i;

	char ch;

	while(1){

		ch = getch();

		if(ch == ENTER || ch == TAB){

			pwd[i] = '\0';

			break;

		}else if(ch == BCKSPC){

			if(i>0){
```

```
                        i--;
                        printf("\b \b");
                    }
                }else{
                    pwd[i++] = ch;
                    printf("* \b");
                }
            }
}
int main(){
    FILE *fp;
    int opt,usrFound = 0;
    char password2[50];
    char usern[100];
    char pword[100];

    printf("\n\t\t\t\t----------Welcome to authentication system----------");
    printf("\nPlease choose your operation");
    printf("\n1.Registration");
    printf("\n2.Login");
    printf("\n3.Exit");
    printf("\n\nYour choice:\t");
    scanf("%d",&opt);
    fgetc(stdin);
    switch(opt){
```

```
case 1:
        system("cls");
        printf("\nEnter your full name:\t");
        gets(usr.fullName);
        usr.fullName[strlen(usr.fullName)]=0;

        printf("Enter your email:\t");
        gets(usr.email);
        usr.email[strlen(usr.email)]=0;

        printf("Enter your contact no:\t");
        gets(usr.phone);
        usr.phone[strlen(usr.phone)]=0;

        printf("Enter your college:\t");
        gets(usr.college);
        usr.college[strlen(usr.college)]=0;

        printf("Enter your branch:\t");
        gets(usr.branch);
        usr.branch[strlen(usr.branch)]=0;

        printf("Enter your reg. no:\t");
        gets(usr.regno);
        usr.regno[strlen(usr.regno)]=0;
```

```
printf("Enter your username:\t");
gets(usr.username);
usr.username[strlen(usr.username)]=0;

printf("Enter your password:\t");
takepassword(usr.password);

printf("\nConfirm your password:\t");
takepassword(password2);



if(!strcmp(usr.password,password2)){
        fp = fopen("Users.dat","a+");
        fwrite(&usr,sizeof(struct user),1,fp);
        if(fwrite != 0)
        {
        printf("\n\nUser resgistration success, Your username is
%s",usr.username);
        }
        else
                printf("\n\nSorry! Something went wrong :(");
        fclose(fp);
}
```

```
            else{
                printf("\n\nPassword donot matched");
            }
            break;
case 2:
            printf("\nEnter your username:\t");
            gets(usern);
            printf("Enter your password:\t");
            takepassword(pword);
            fp = fopen("Users.dat","r");
            while(fread(&usr,sizeof(struct user),1,fp)){
                if(!strcmp(usr.username,usern)){
                    if(!strcmp(usr.password,pword)){
                        system("cls");
                        printf("\n\t\t\t\t\t\tWelcome %s",usr.fullName);
                        printf("\n\n|Full Name:\t%s",usr.fullName);
                        printf("\n|Email:\t\t%s",usr.email);
                        printf("\n|Username:\t%s",usr.username);
                        printf("\n|Contact no.:\t%s",usr.phone);
                        printf("\n|College.:\t%s",usr.college);
                        printf("\n|Branch :\t%s",usr.branch);
                        printf("\n|Reg. no.:\t%s",usr.regno);
                    }
                    else {
                        printf("\n\nInvalid Password!");
```

```
                                        }
                                        usrFound = 1;
                                }
                        }
                        if(!usrFound){
                                printf("\n\nUser is not registered!");
                        }
                        fclose(fp);
                        break;
                case 3:
                        printf("\t\t\tBye Bye :)");
                        return 0;
        }
        return 0;
}
```

Implementation issues and challenges: -

The major challenge of the project is the shortage of time because time is needed to learning the code and need to implement the system. The time also uses to find out the better solution from the others proposed solution. The proposed solution needed to study and find out their strength and weaknesses to be improved so that can learn from their problem. The next challenge of the project will be the limitation of understanding the code used to implement the system. The coding will be a very fresh programming language for me since it is very new for me.

Conclusion: -

Classification is the major data mining technique which is primarily used in healthcare sectors for medical diagnosis and predicting diseases. This research work used classification algorithms namely Naïve bayes and Support Vector Machine (SVM) for liver disease prediction. Comparisons of these algorithms are done and it is based on the performance factors classification accuracy and execution time. From the experimental results, this work concludes, the SVM classifier is considered as a best algorithm because of its highest classification accuracy. On the other hand, while comparing the execution time, the Naïve Bayes classifier needs minimum execution time.

References: -

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6)