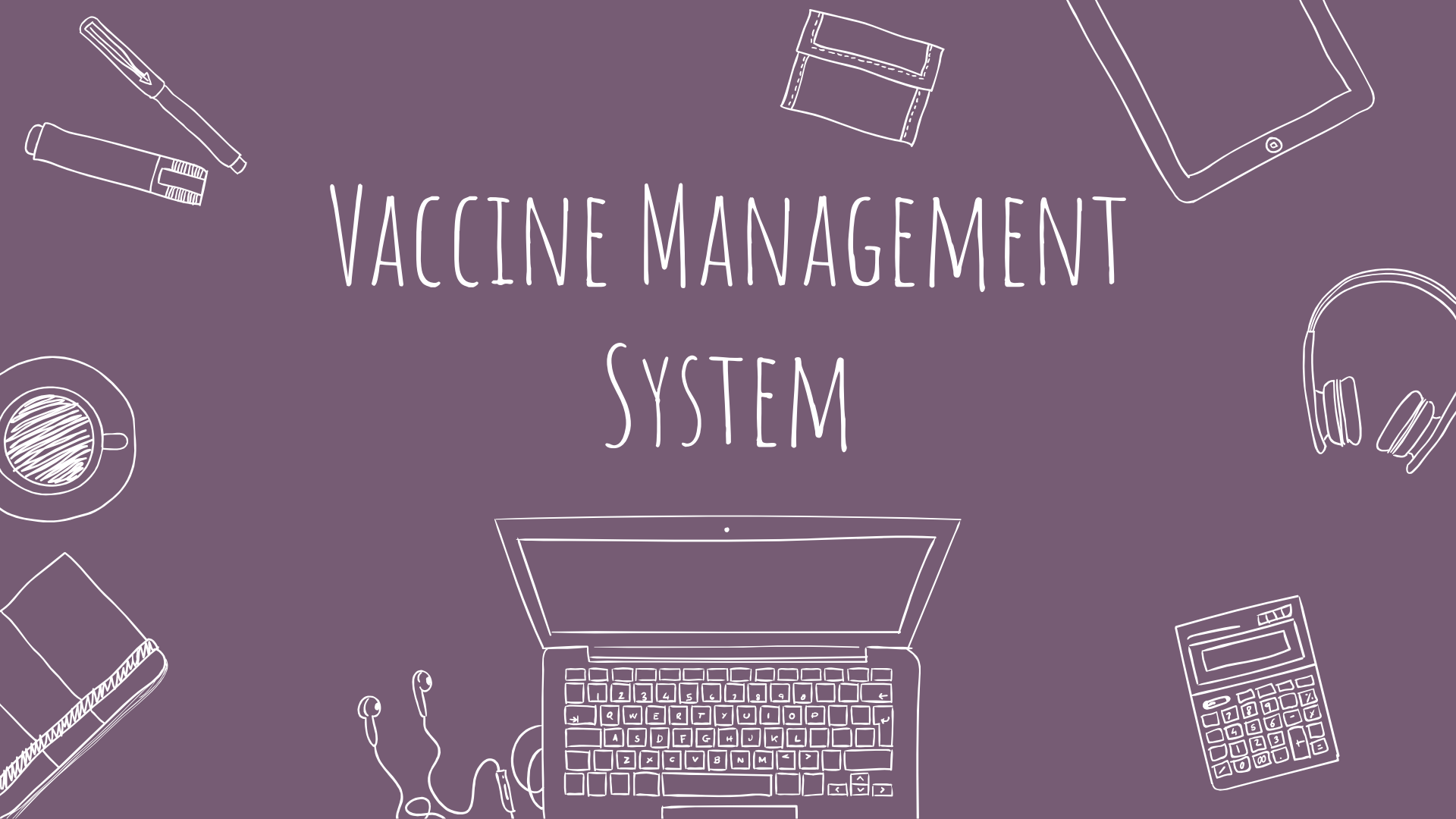



VACCINE MANAGEMENT SYSTEM



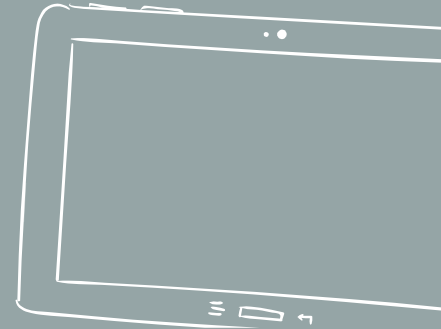


CO 101 PROJECT 2021



KUNAL SAINI
2K20/A9/52

Submitted to –
Ms. PRIYA SINGH
Department of Computer Science
Delhi Technological University





Hi!

HELLO!

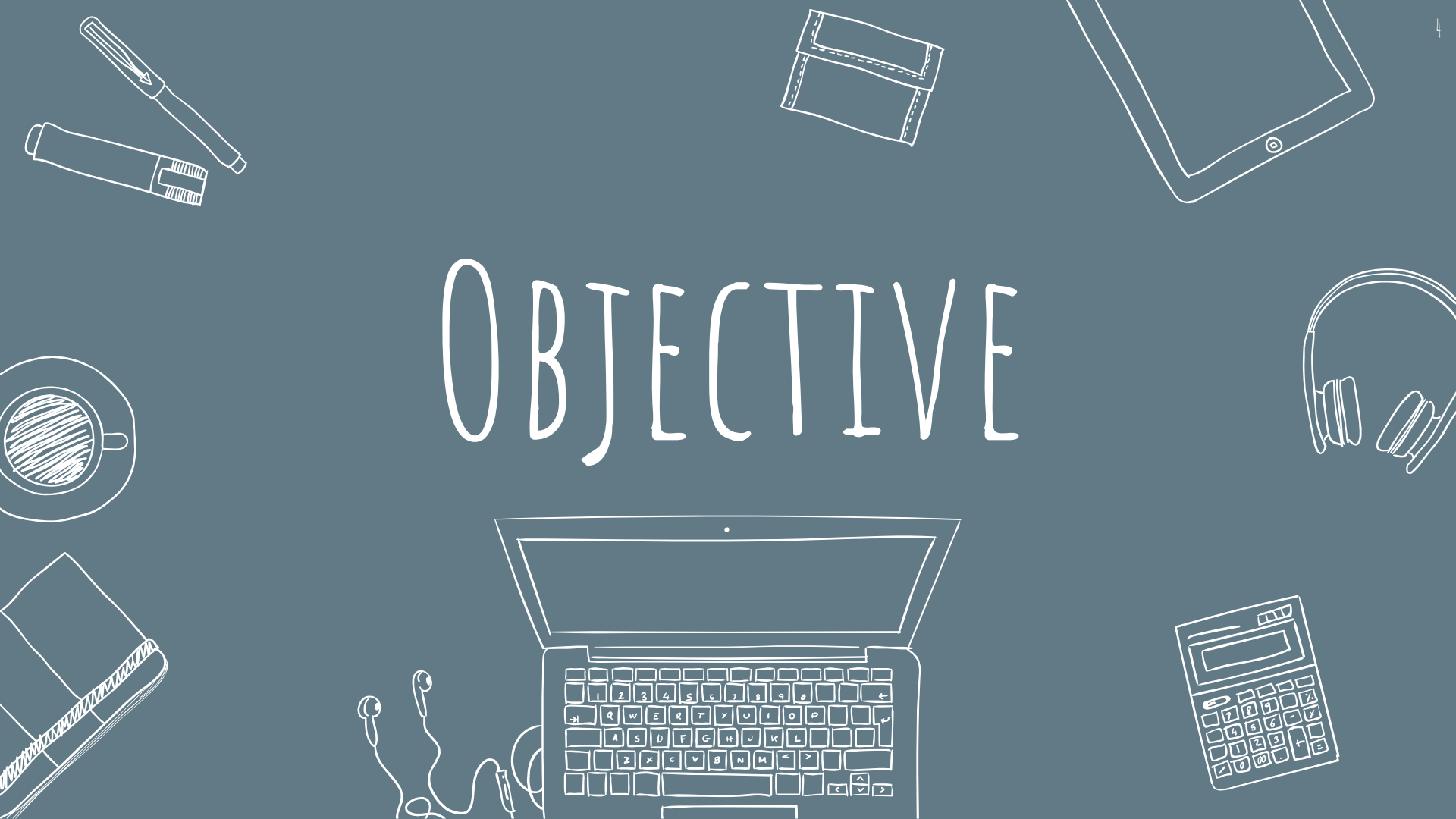
I, KUNAL SAINI

This is a presentation about my programming fundamentals project – *Vaccine Management System*

You can find me at:

kunalsaini_me20a9_52@dtu.ac.in

OBJECTIVE





The aim of this project is to design a Vaccine Management System

for the newly found COVID-19 vaccination centers to facilitate the data management and handling of the data of the vaccinated people in an easy and secure manner.

MOTIVATION



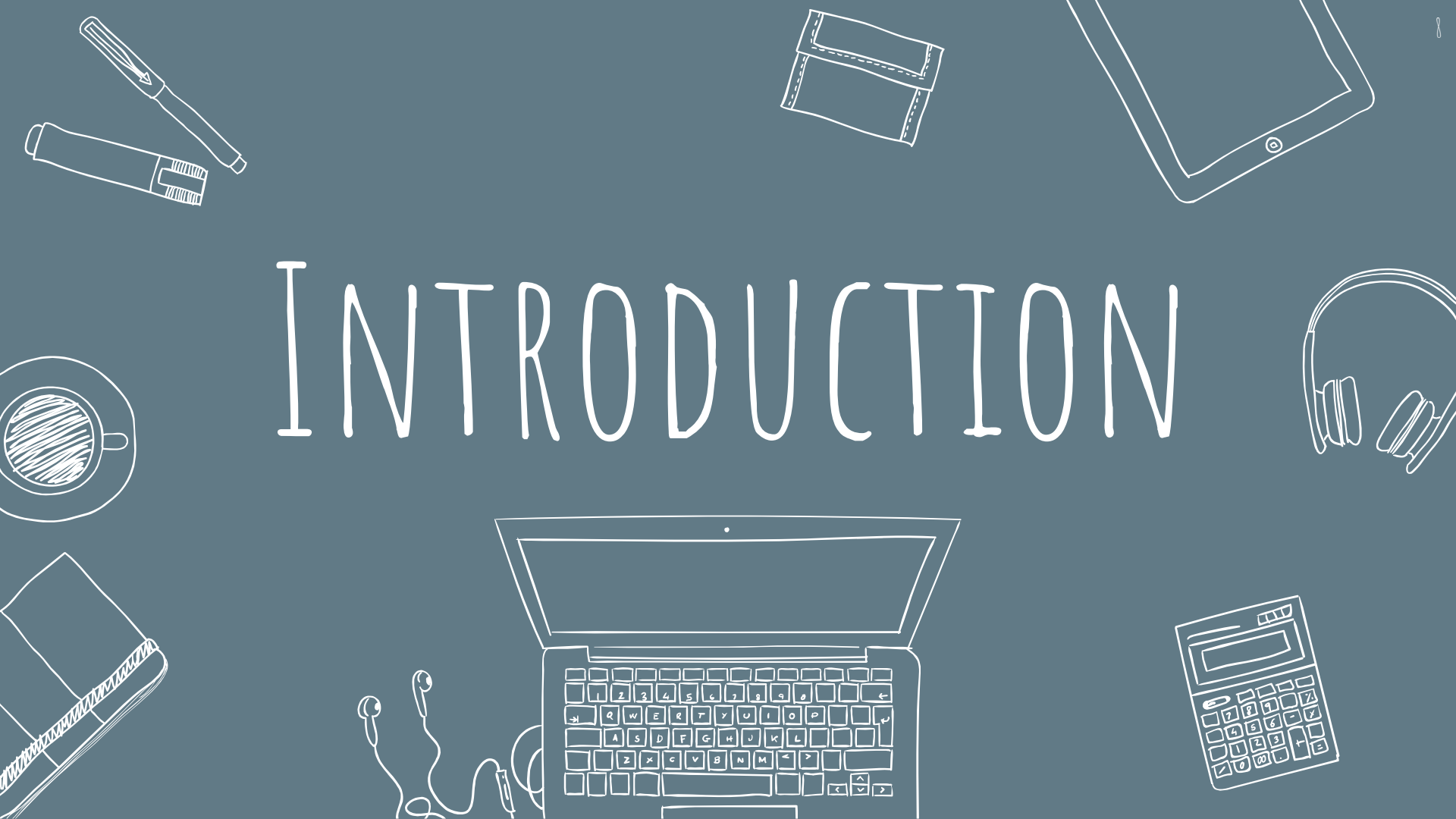


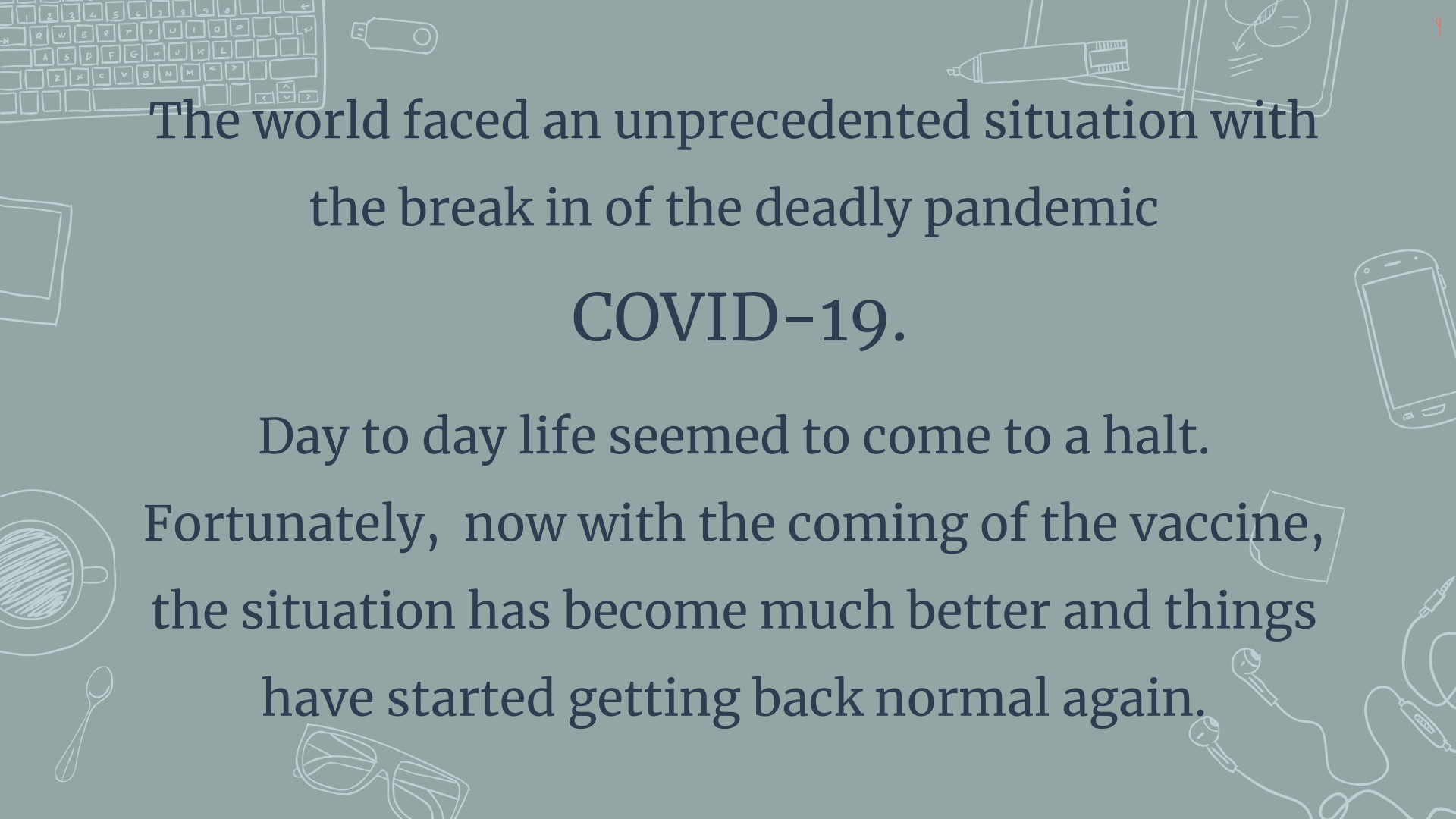
It's said that...

*Action without knowledge
is useless, but knowledge
without action is futile.*



INTRODUCTION





The world faced an unprecedented situation with
the break in of the deadly pandemic
COVID-19.

Day to day life seemed to come to a halt.
Fortunately, now with the coming of the vaccine,
the situation has become much better and things
have started getting back normal again.

We've already lost a lot due to the pandemic.

Thus, many vaccination centers have been setup to get the situations back to normal as soon as possible.

These vaccination centers would need an easy to use yet efficient way to handle and manage the data of the people getting vaccinated.

Thus, as a student of Computer Science, although yet a beginner, I decided to take up this project to make an efficient database management system for the vaccination centers with proper security of the data and contribute my little bit to help the nation stand back again....

BACKGROUND



When it comes to file handling, C++ is a really efficient language and this was the reason to select C++ as the language for the program.

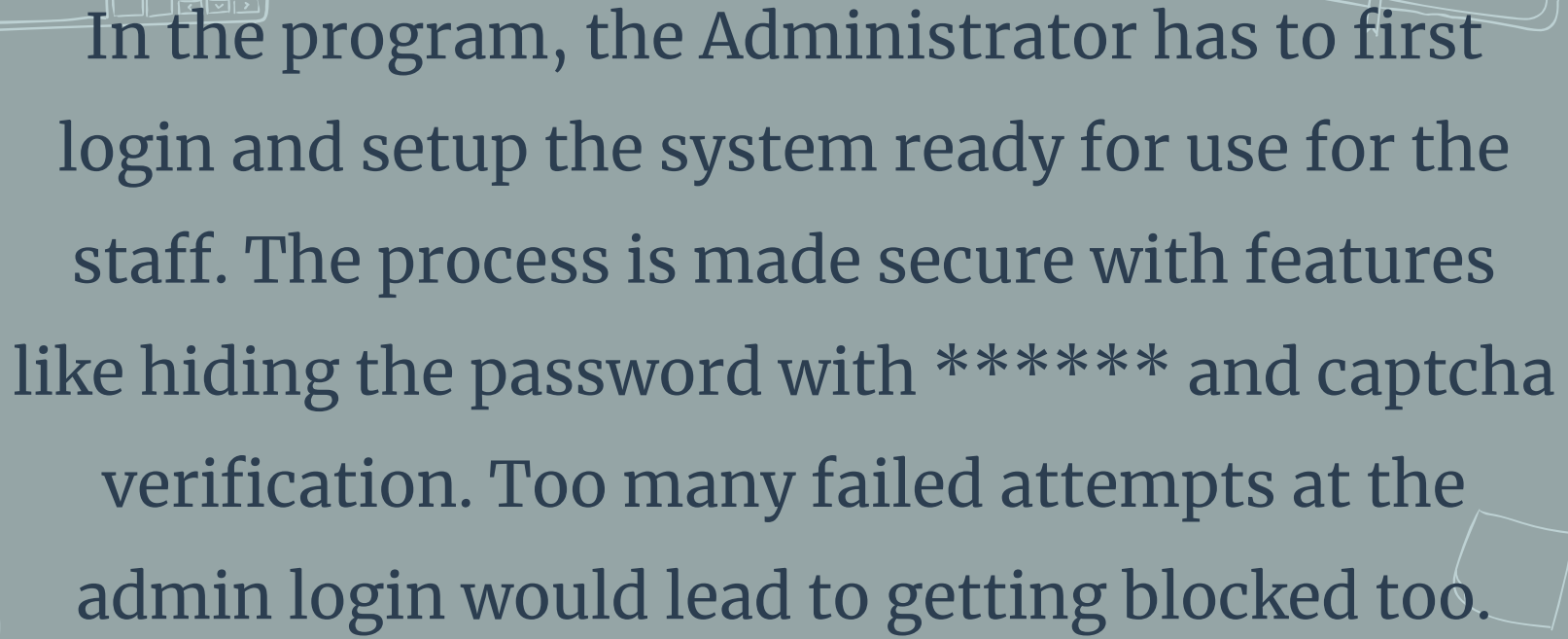
Database Management Systems are easily made in C++ programming language because of its modular nature and its proximity to the Computer Hardware.

For this reason, many Database Management Systems are made in C++ programming language. This program however is going to be different from other Database Management Systems in many ways and has very specific features that a vaccination center would need. Apart from effectively managing the data of the vaccinated people, it would also help the vaccination center to keep track of the number of vaccines and would facilitate their proper and efficient working.



APPROACH

Let's get to the actual project now...

The background is a solid light gray color. It is decorated with various white line-art illustrations. In the top left, there is a partial view of a computer keyboard. To its right is a USB drive. In the top right, there is a laptop with a pen resting on it and a small notepad with a pencil. On the right side, there is a smartphone. In the bottom left, there is a cup of coffee on a saucer with a spoon next to it. At the bottom center, there is a pair of sunglasses. In the bottom right, there are a pair of earbuds with their charging case and a coiled cable.

In the program, the Administrator has to first login and setup the system ready for use for the staff. The process is made secure with features like hiding the password with `*****` and captcha verification. Too many failed attempts at the admin login would lead to getting blocked too.



Now comes the part of the staff. The staff here have 3 options.



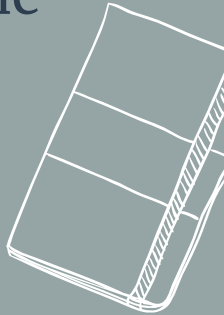
✓ Register for new staff

✓ Login for existing staff

✓ Forgot login credentials feature

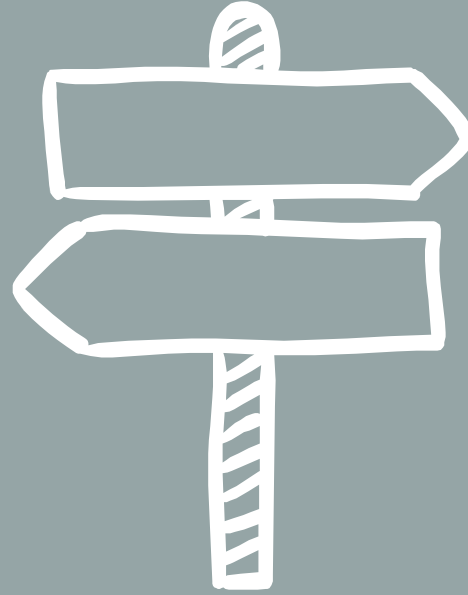



Once the staff logs in successfully, he can now work with the actual database management system.



After successful login, the staff gets 4 options
primarily


- ✓ Add New Record
- ✓ View Vaccine Data
- ✓ Search Records
- ✓ Logout






A user can search the data of the vaccinated people in several ways

- ✓ By Aadhaar Number
- ✓ By Age
- ✓ By Gender
- ✓ By past COVID history




And also the number of people vaccinated by that criteria.



The view vaccine option has primarily 2 features.

- ✓ View the number of remaining vaccines.

The system issues a warning if the number of vaccines are running low.

- ✓ Add more vaccines feature
For when the centre receives more vaccines.
- 

Data entry? Easy and error free...

- ✓ Aadhar Number is ensured to be of the correct format.

The correctness of Aadhar number is a must.

```
if ( Aadhar_Number != Valid ||  
Aadhar_Number == 'duplicate' )
```

```
entry.deny }
```

- ✓ Ever seen a 11 digit mobile number with alphabets?

Nor will you with this program. It does not end at the vaccination afterall. We need to stay in touch :)

- ✓ What does it mean if you enter a 't' to a Y|N question?

It would be better if you don't. This program won't let you. ;)

IMPLEMENTATION




WHAT HAVE I PRIMARILY USED?

Functions



File Handling

Classes




Function for this and function for that...

Function for everything..




✓ Want to start? Not without the admin login function.

✓ Made a mistake while entering the Aadhar Number? Beware of the Aadhar number validation function.






✓ Want to login? Here's the staff login function.

✓ Want to search? The search functions are here for you.




✓ Want to update the vaccine status? Where are you “vaccine status” functions?





Database Management System without File Handling



== Daydreaming



Staff login credentials?

“stafflogin.txt”

Vaccination Data?

“records.txt”

Vaccine Status?

“count.txt”



Feel free to Add / Search / View :)





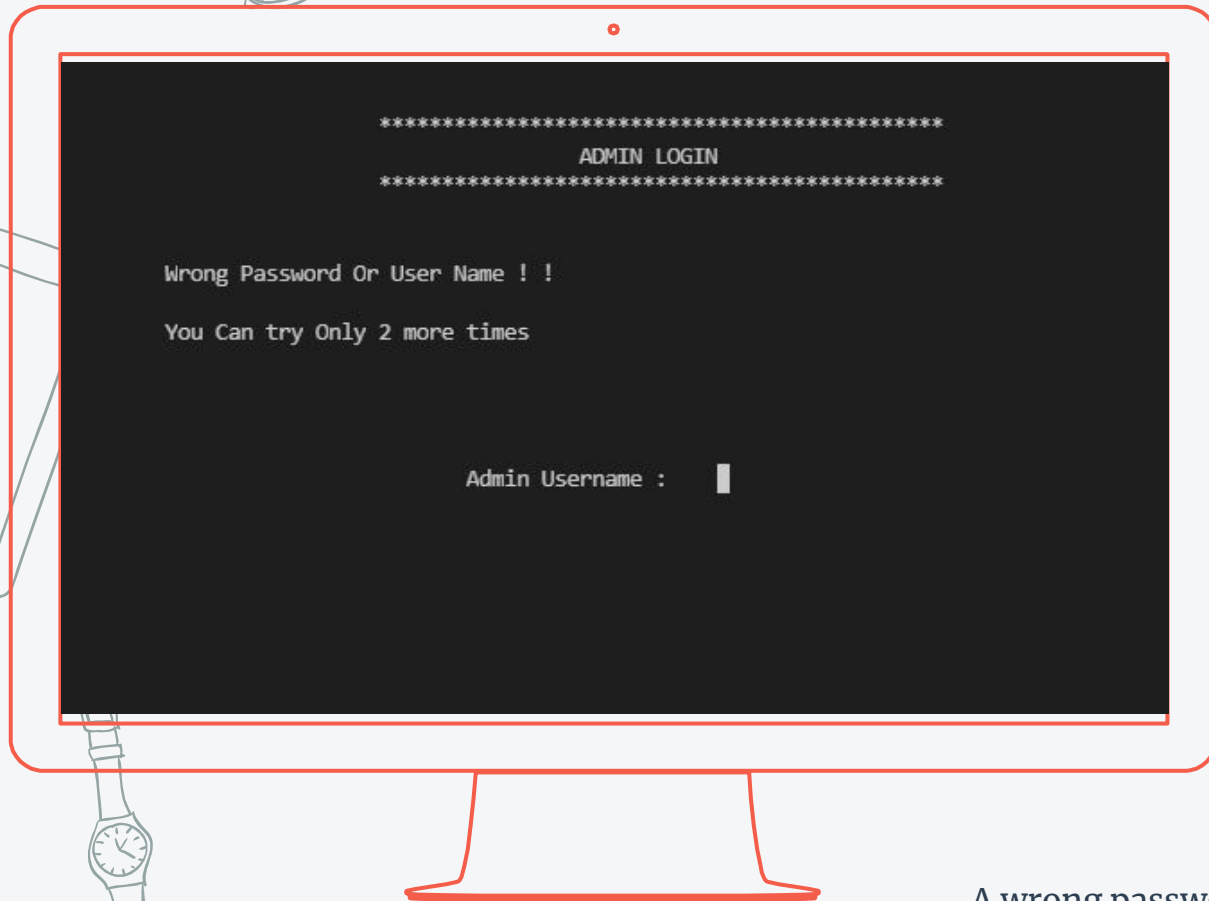
|||| | VACCINE MANAGEMENT SYSTEM | |||||

Presented By:- krish saini and kunal saini

Press any key to continue..... █

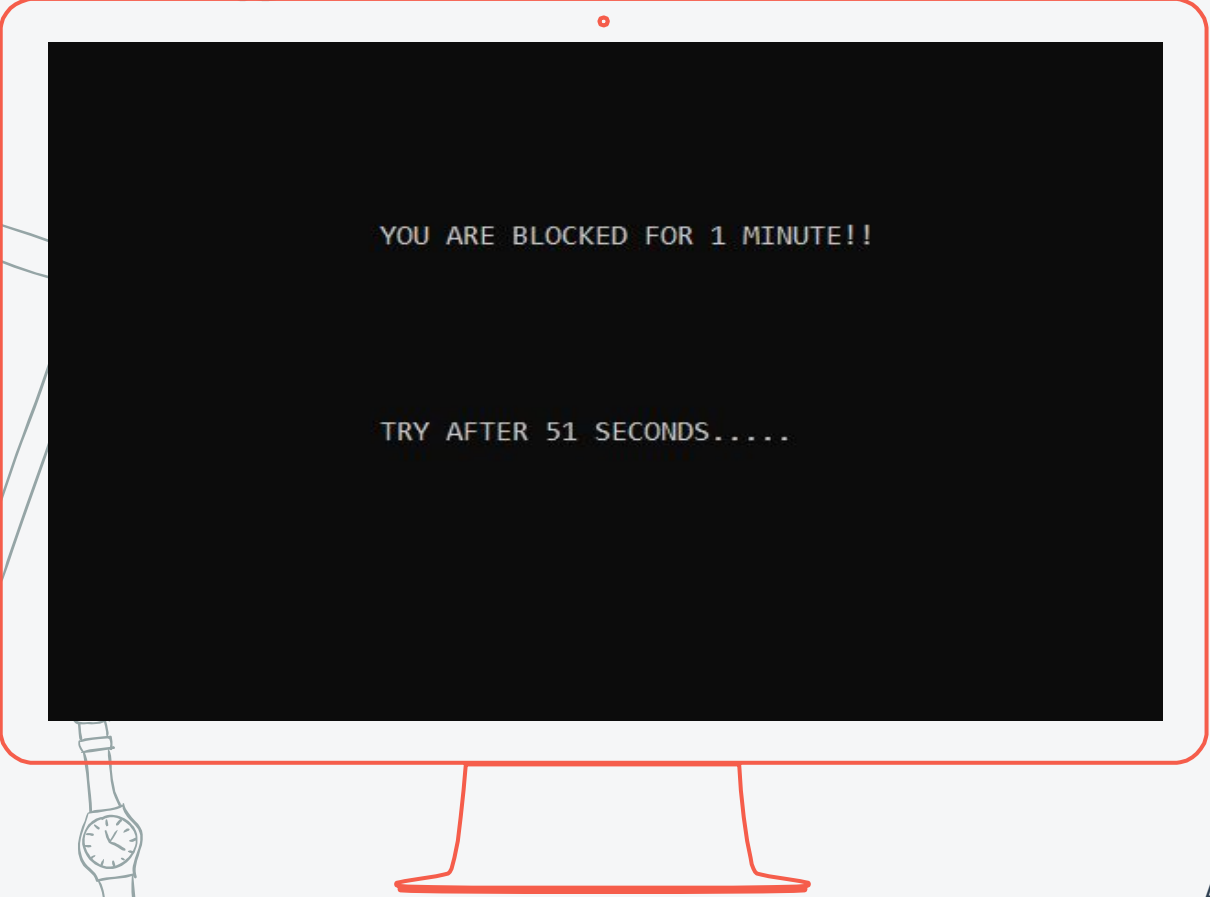
FIRST SCREEN

I'll press the 'next slide' key..



ADMIN LOGIN

A wrong password in the first attempt is not a very pleasant feeling... :(



YOU ARE BLOCKED FOR 1 MINUTE!!

TRY AFTER 51 SECONDS.....

BLOCKED!!

Admin ony please ;)

```
*****  
ADMIN LOGIN  
*****
```

Admin Username : krish2003

Admin Password : *****

Captcha : 21882

Please enter the valid captcha : 21882

Admin Login Successful!!!

System ready to use for Staff.█

LOGIN SUCCESSFUL !

Hope you didn't see my password ;)

Welcome to login page

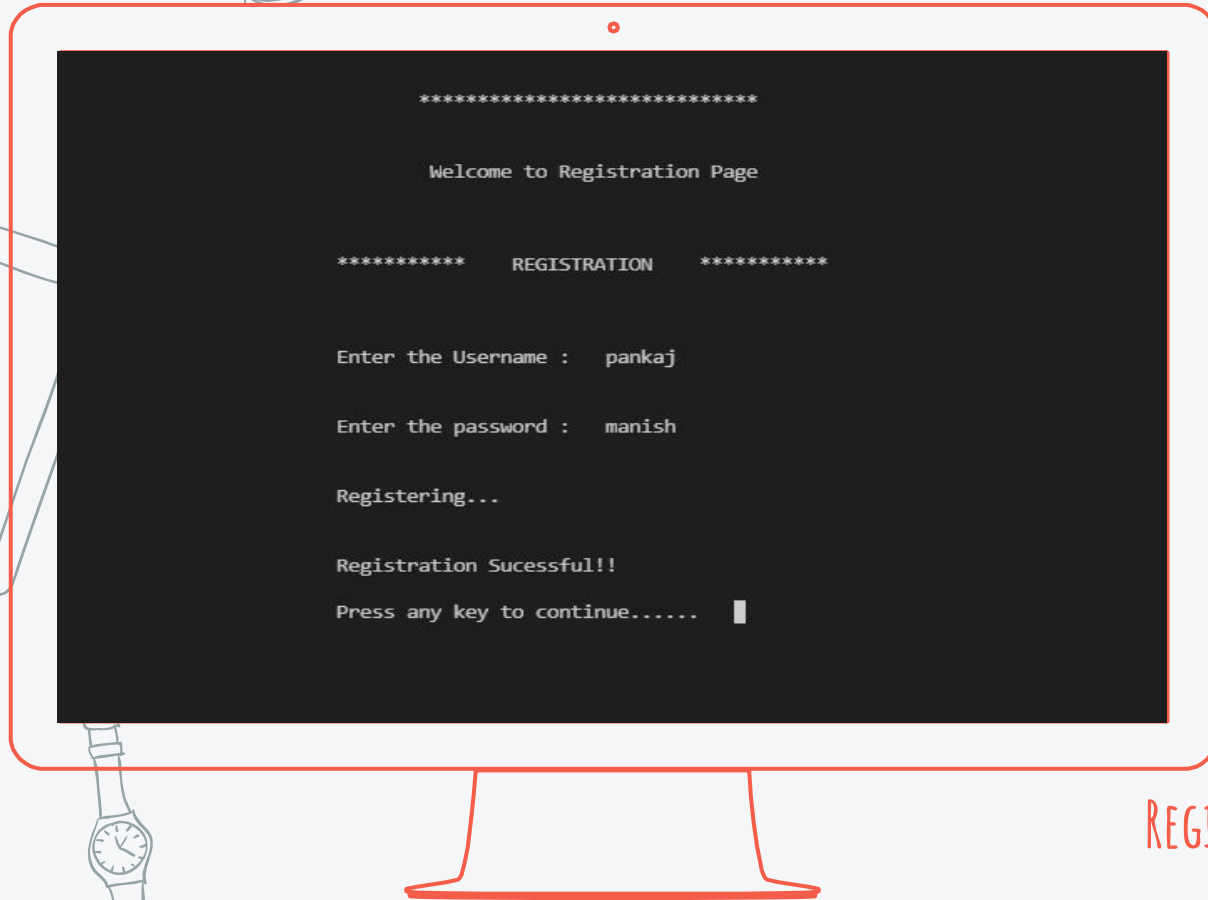
***** MENU *****

1. LOGIN
2. REGISTER
3. FORGOT PASSWORD (or) USERNAME
4. Exit

Enter your choice : 2

REGISTRATION

New staff at work perhaps..



REGISTRATION SUCCESSFUL !

Time to login now.

Welcome to Login Page

***** LOGIN *****

Please enter the following details :

USERNAME : pankaj

PASSWORD : pankaj

Logging in...

LOGIN ERROR!!!!

Please check your Username and Password

Press any key to continue.....

LOGIN ERROR !

A hard time with passwords today.. :(

Welcome to Recovery Page

***** FORGOT? *****

Forgotten ? We're here for help

1. Search your ID by Username
2. Search your ID by Password
3. Back

Enter your choice : 1

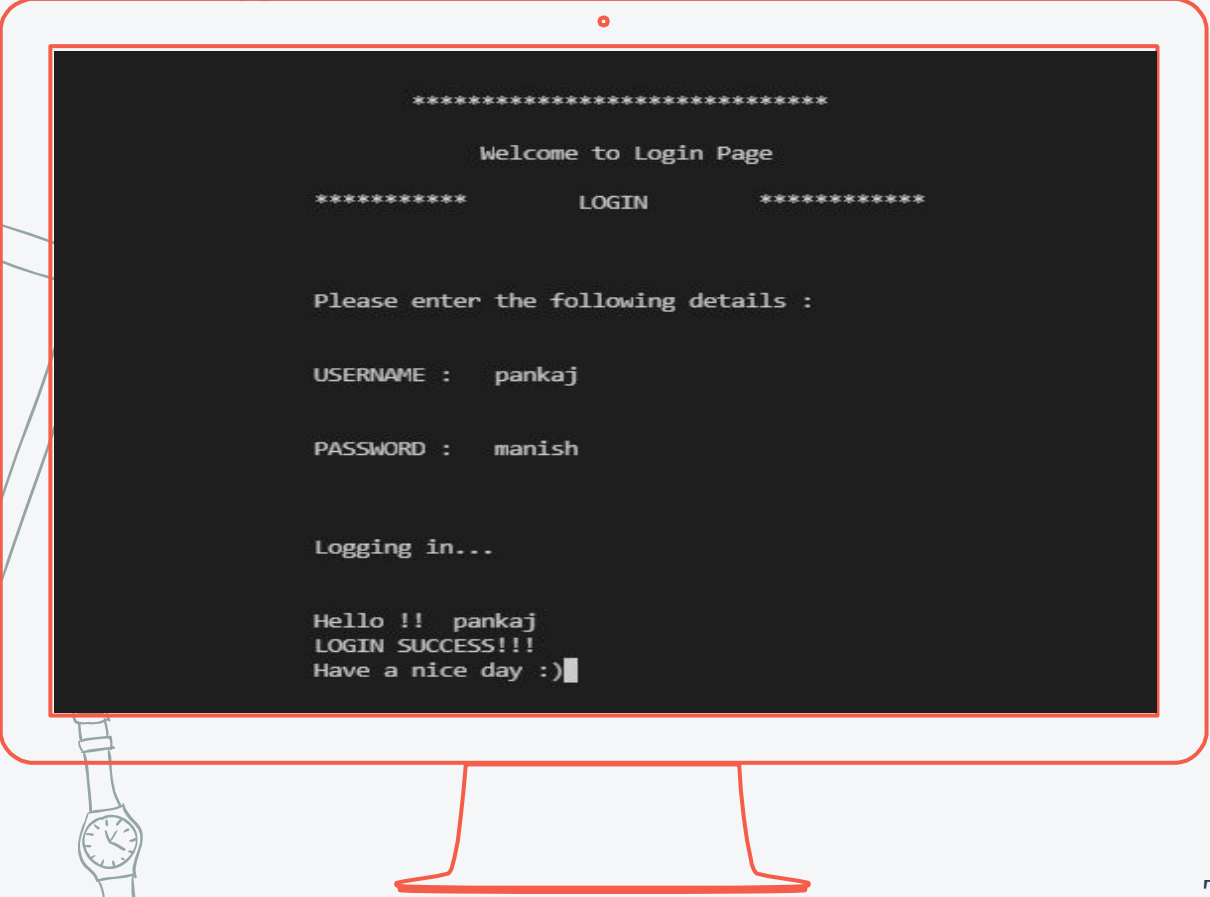
Enter your remembered Username : pankaj

Hurray !! Account found !!!

Your password is : manish

ACCOUNT RECOVERED !

Don't forget it again..



```
*****  
Welcome to Login Page  
*****      LOGIN      *****  
  
Please enter the following details :  
  
USERNAME :  pankaj  
  
PASSWORD :  manish  
  
Logging in...  
  
Hello !!  pankaj  
LOGIN SUCCESS!!!  
Have a nice day :)|
```

LOGIN SUCCESS !

Time to work now...

||||| VACCINE MANAGEMENT SYSTEM |||||

Presented By:- krish saini and kunal saini

MENU

1: Add New Record

2: View Vaccine Data

3: Search

4: Logout

Choose according to your need : 1|

VACCINATION BEGINS !

Let's enter some data..



|||| VACCINE MANAGEMENT SYSTEM ||||

Presented By:- krish saini and kunal saini

DATA ENTRY

There are no vaccines remaining in stock ! !

Add more vaccines first.

NO VACCINE !

Promises :([political satire ;)]

||||| VACCINE MANAGEMENT SYSTEM |||||

Presented By:- krish saini and kunal saini

VACCINE STATISTICS

1. Add More

2. View Available

3. Back

Please choose according to your need : 1

Enter number of vaccines you want to add : 10

Now total number of vaccines are : 207

VACCINES RECEIVED !

One eternity later...

||||| VACCINE MANAGEMENT SYSTEM |||||

Presented By:- krish saini and kunal saini

DATA ENTRY

Enter Name	:-	pankaj
Enter Aadhar Number	:-	789456123789
Enter Age	:-	30
Enter Profession	:-	Driver
CoVid Patient (Y N)	:-	N
Enter Blood Pressure	:-	80/115
Enter Body Temperature	:-	37
Enter Gender (M F)	:-	M
Enter Mobile Number	:-	7894561237
Enter Permanent Address	:-	Himachal Pradesh

DATA ENTRY !

Lots of typos today ;)

|||| | VACCINE MANAGEMENT SYSTEM | |||||

Presented By:- krish saini and kunal saini

MENU

1: Add New Record

2: View Vaccine Data

3: Search

4: Logout

Choose according to your need : 3

SEARCHING !

Let's check if 'xyz' has been vaccinated..

|| || | VACCINE MANAGEMENT SYSTEM | || ||

Presented By:- krish saini and kunal saini

AADHAR SEARCHING

Please enter the Aadhar number to search : 789456123789

DETAILS

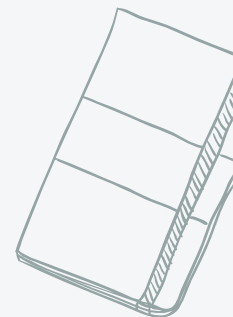
Name is	:	pankaj
Aadhar number is	:	789456123789
Age is	:	30
Profession is	:	Driver
CoVid History is	:	N
Blood pressure is	:	80/115
Body temperature is	:	37
Gender is	:	M
Address is	:	Himachal Pradesh
Mobile number is	:	7894561237

SEARCHING !

Yes Sir, you have been vaccinated..



4]



LOGGING OFF !

C you.. :)




FUTURE WORK





A project is never complete....



- 
- ✓ A hospital does not have just CoVid wards.
As a part of a larger project, this can be merged along with the larger hospital database management system which covers all varieties of general wards too.

- ✓ The record of staff wise number of records entered can be stored and used.
- ✓ An app with a more interesting interface would be perfect :)



REFERENCES



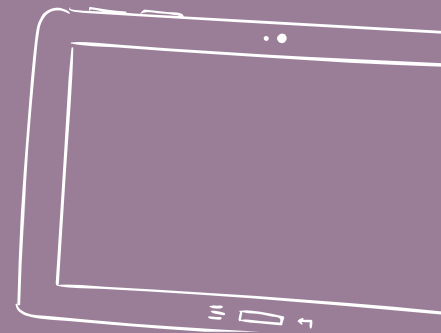
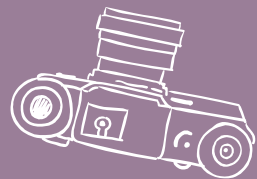
 https://youtube.com/playlist?list=PLu0W_9lII9agpFUAlPFe_VNSlXW5uEoYL

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 <https://www.javatpoint.com/file-handling-in-c>

THANK
YOU!





Bye :)