

# **QR BASED ATTENDANCE SYSTEM**

## **TEAM MEMBERS**

**P.SAI THARUN**

**MOHAMMAD RIYAZ**

**M.KUSHAL KUMAR**

**SD.NAMMAN QADRI**

## **HT.NO**

**(19S41A0572)**

**(19S41A0554)**

**(19S41A0562)**

**(19S45A0587)**

**Under The Guidance of  
Mrs. SABBANI ANITHA**

Assistant professor



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# INTRODUCTION

- In this era of technology smartphones play a significant role in our day to day life. Nowadays smartphones can solve most of the problem very quickly and easily. It has made life of every person simple and easier with different social app, commercial app, problem solving app, app for education and marketing etc.
- Followed by the technology the paper purposed a system that will handle a problem for recording the attendance.
- The proposed system is a couple of two applications, one for generating the QR Code by entering the student details and second application for taking the attendance and generating the attendance in CSV or XLS format.



## Proposed system

The proposed QR code-based attendance system aims to automate and streamline the attendance tracking process in various institutions, organizations, or events. This system utilizes QR (Quick Response) codes, which are two-dimensional barcodes that can be easily scanned using a smartphone or a dedicated QR code scanner.

Here's how the proposed system works:

- Generation of Unique QR Codes
- Displaying QR Codes
- Attendance Recording
- Verification and Database Integration
- Real-time Reporting



## Advantages:

- This system decreases the human effort of manually taking attendance of every student & employee
- There is very least possibility for proxies to occur.
- In this “**NO-CONTACT**” period, this system can be used as an alternative to the biometric attendance system.



## Existing system

QR code-based attendance systems are already in use in various settings, including educational institutions, corporate organizations, and event management companies. These systems offer several advantages over traditional attendance tracking methods, such as paper-based sign-in sheets or manual data entry systems.

Existing QR code-based attendance systems often incorporate additional features and functionalities, such as

- Mobile Applications
- Integration with Student Information Systems (SIS)
- Analytics and Insights:
- Security and Authentication

Overall, QR code-based attendance systems provide a convenient, efficient, and accurate method of recording attendance, reducing manual effort, and enhancing data management capabilities



## Disadvantages

- The accuracy of the data collected is the biggest issue in old system.
- Proxy or other ways are easily possible.
- Identity can't be manipulated

# System Requirements

## Software Requirements:

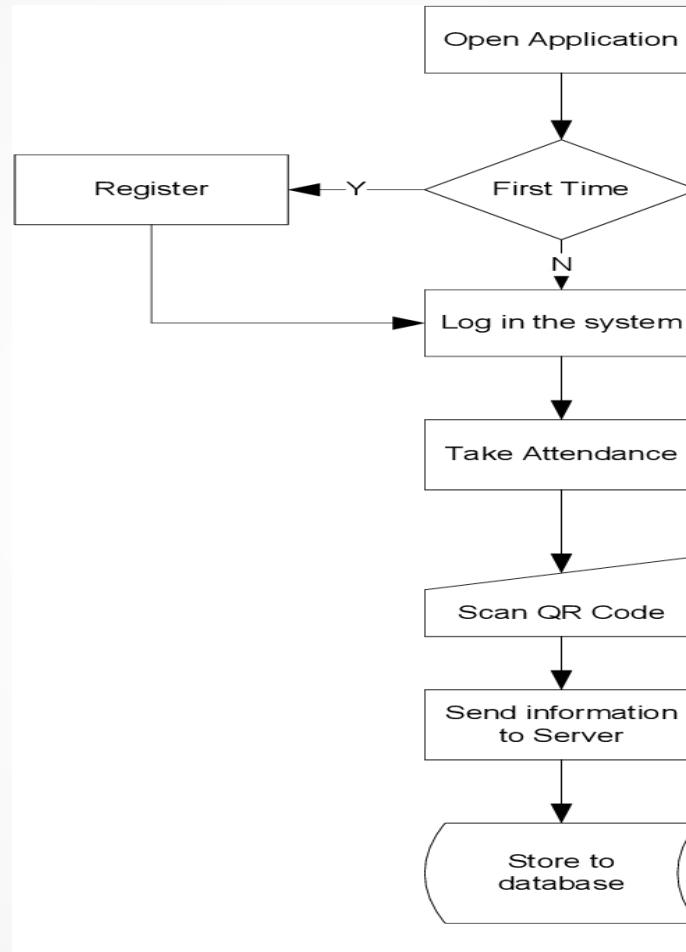
- Operating system : Windows 7/10
- Language : python 3.4.7,Pycharm
- Domain : Machine Learning
- Alogrithms : Cascade , CNN

## Hardware Requirements:

- Processor : intel® core(TM) i5
- CPU : 1.60 GHz 1.80GHz
- Ram : 4GB
- Hard disk : 10GB

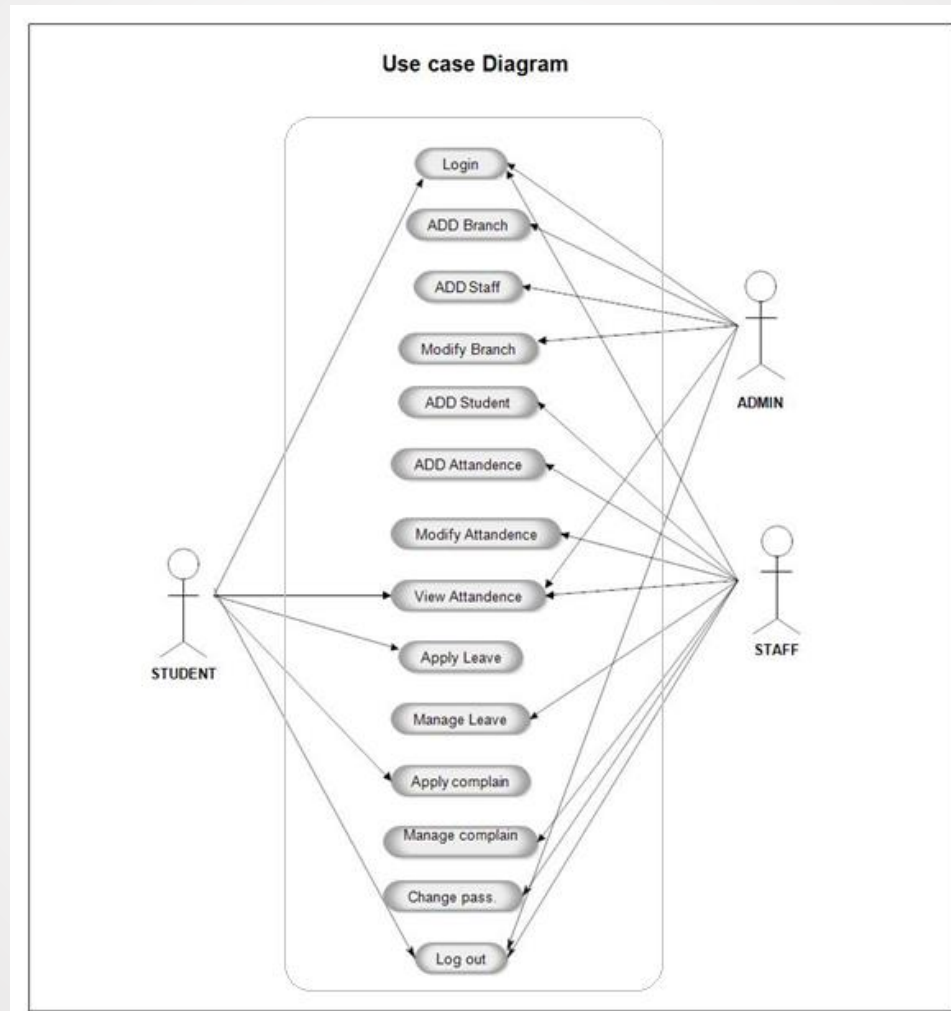


# SYSTEM DESIGN

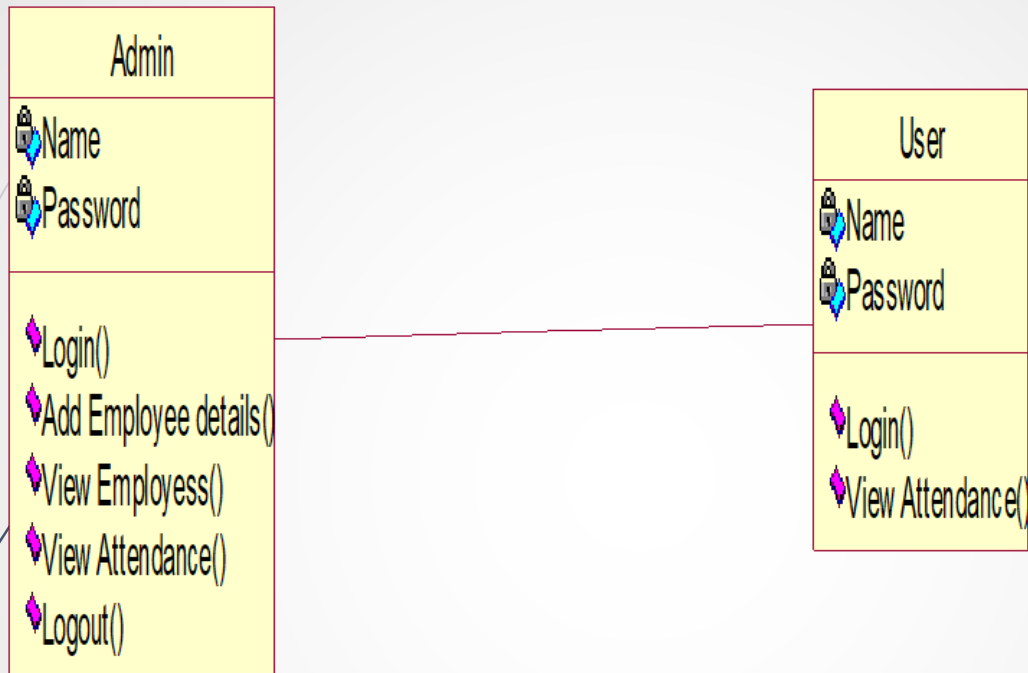


## System Architecture

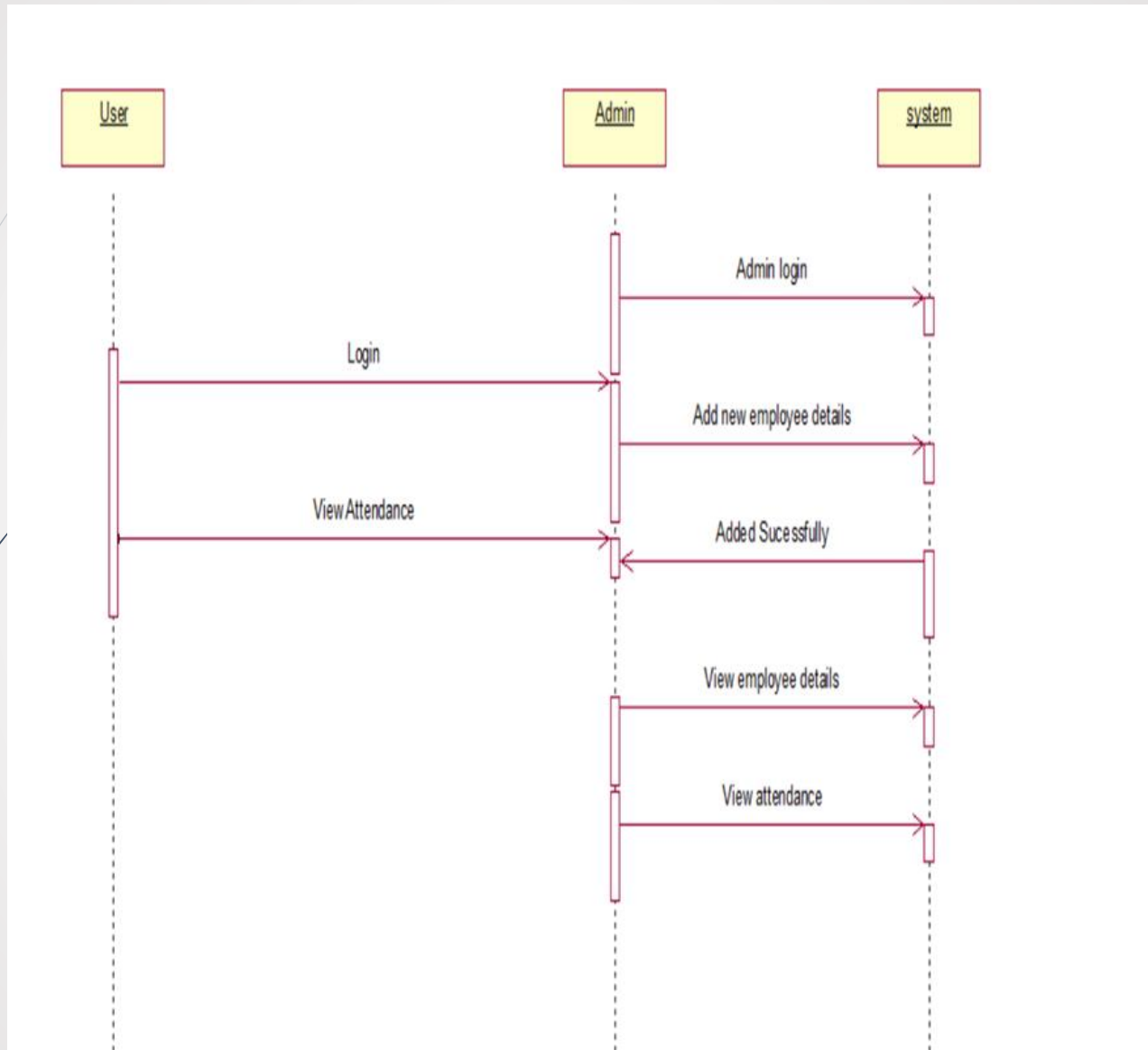
# UML DIAGRAMS



Use case diagram



**Class diagram**



**SEQUENCE DIAGRAM**



# MODULES

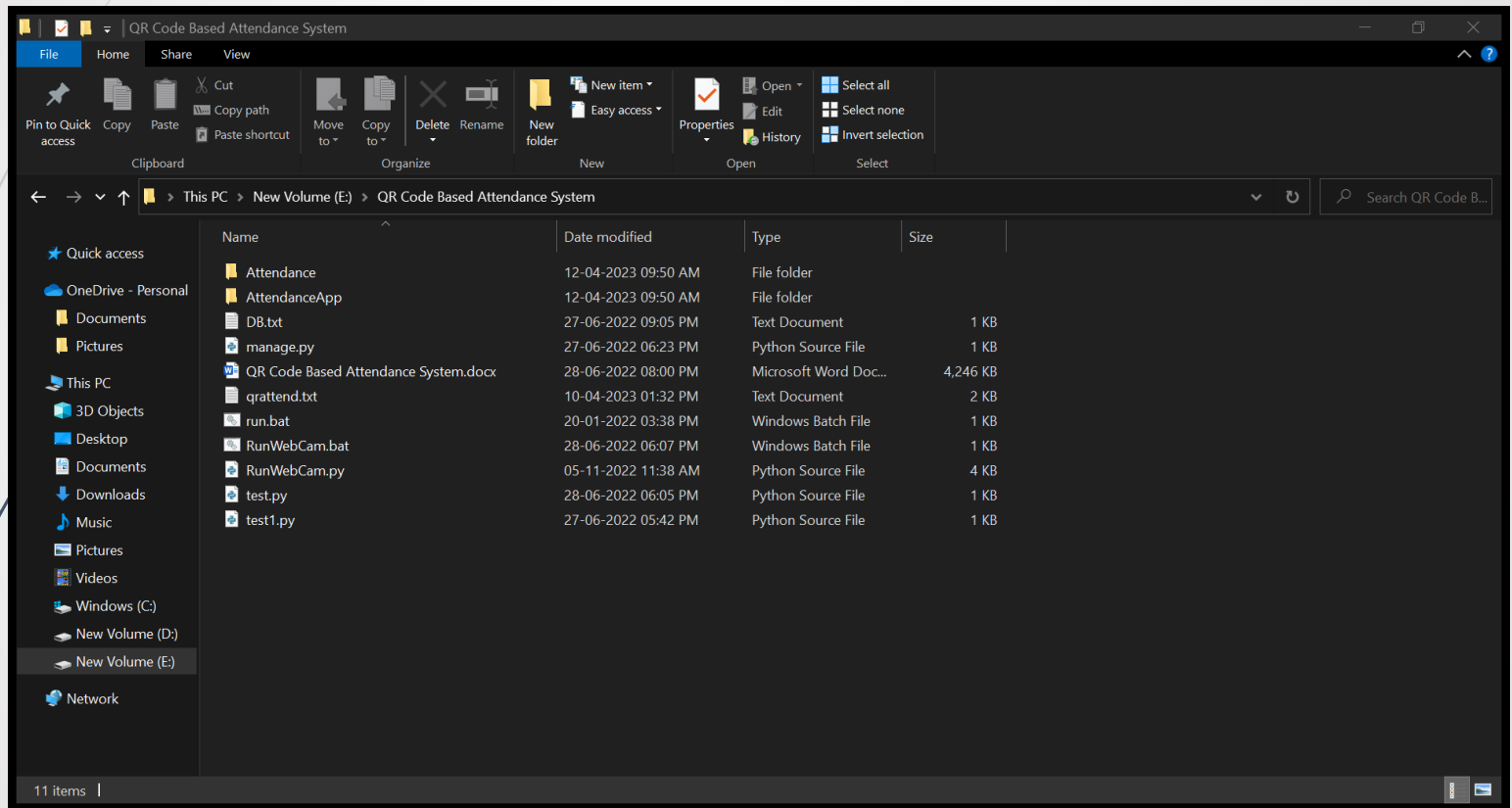
- **ADMIN MODULE**
  - **EMPLOYEE LOGIN MODULE**
  - **QR CODE WEBCAM SCANNER**
- 



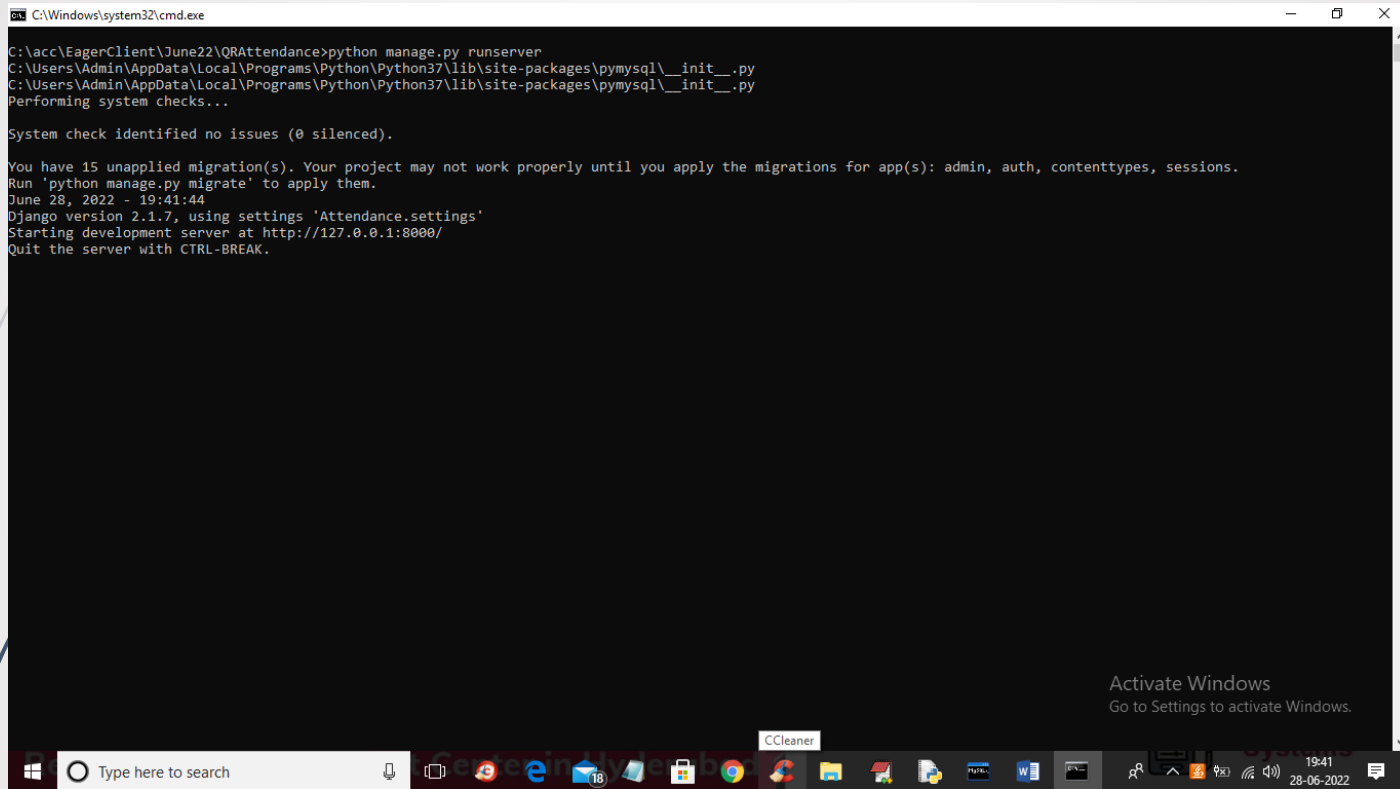
## WORKING

- First we create a project in the PyCharm IDLE.
- Store a few images of students in the database.
- Type and execute the correct source code.
- Error-free code runs and the camera opens on the laptop.
- Now it detects the faces of students who stand in front of the camera according to the images stored in the database earlier.
- The attendance also gets saved in a CSV file.

# OUTPUT SCREENSHOTS



Open file Location



```
C:\Windows\system32\cmd.exe

C:\acc\EagerClient\June22\QRAAttendance>python manage.py runserver
C:\Users\Admin\AppData\Local\Programs\Python\Python37\lib\site-packages\pymysql\__init__.py
C:\Users\Admin\AppData\Local\Programs\Python\Python37\lib\site-packages\pymysql\__init__.py
Performing system checks...

System check identified no issues (0 silenced).

You have 15 unapplied migration(s). Your project may not work properly until you apply the migrations for app(s): admin, auth, contenttypes, sessions.
Run 'python manage.py migrate' to apply them.
June 28, 2022 - 19:41:44
Django version 2.1.7, using settings 'Attendance.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```


**Open Cmd to move homepage**



QR Code Based Attendance System

127.0.0.1:8000/AddEmp.html

For quick access, place your bookmarks here on the bookmarks bar. [Import bookmarks now...](#)



## QR Code Based Attendance System

*Design By Ashutosh Raut*

### Add New Employee Screen

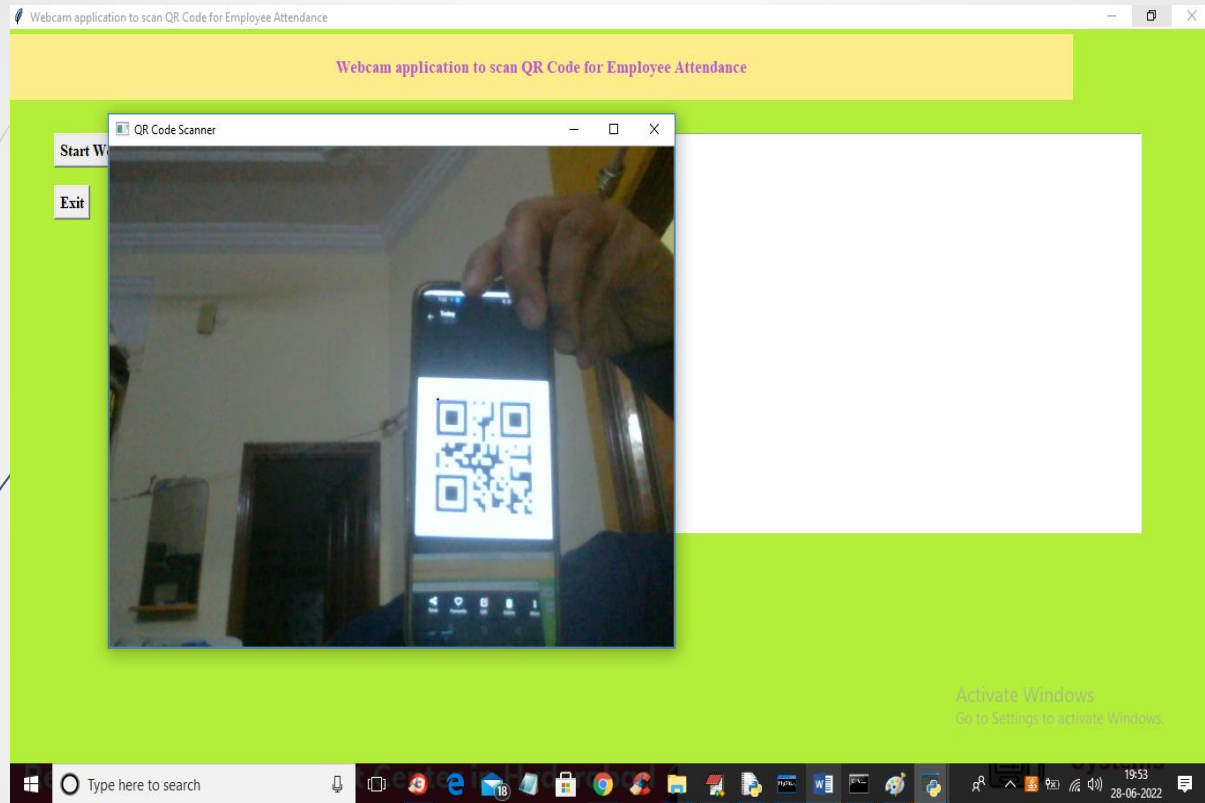
Employee ID	<input type="text" value="kumar01"/>
Employee Name	<input type="text" value="kumar"/>
Contact No	<input type="text" value="7778889997"/>
Gender	<input type="text" value="Male"/>
Email ID	<input type="text" value="kumar@gmail.com"/>
Address	<input type="text" value="hyd"/>
Designation	<input type="text" value="Software Engineer"/>
Salary	<input type="text" value="50000"/>
	<input type="button" value="Submit"/>

Activate Windows  
Go to Settings to activate Windows.

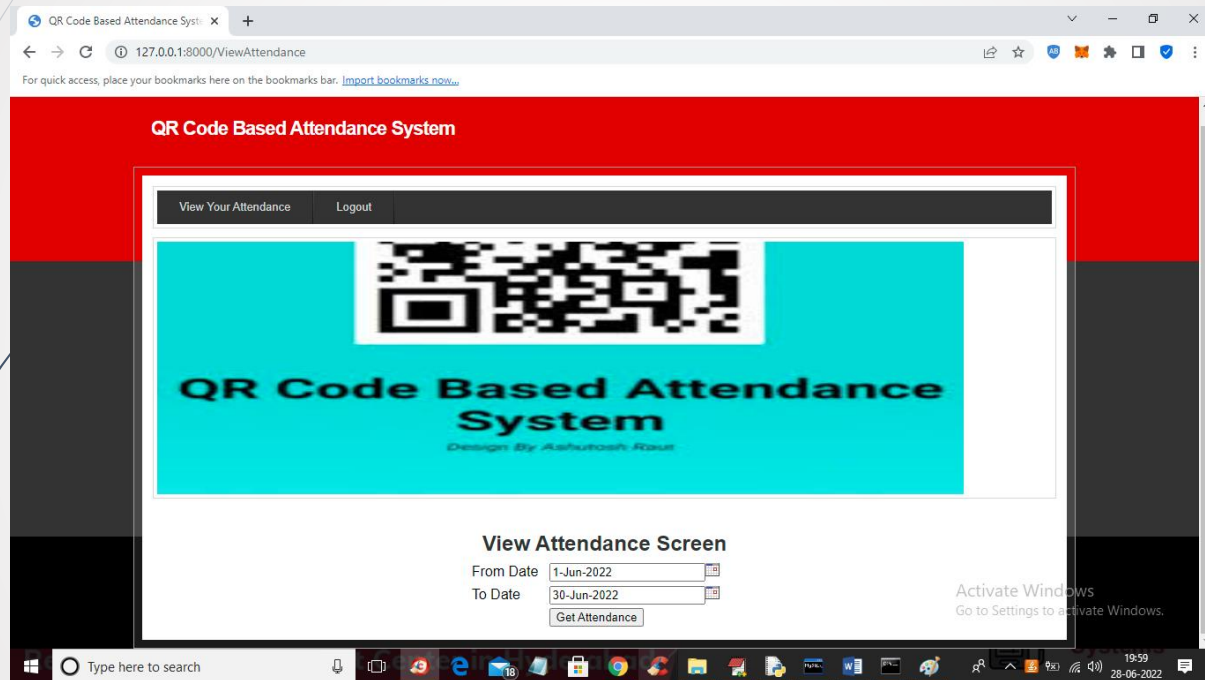
Type here to search

19:45  
28-06-2022

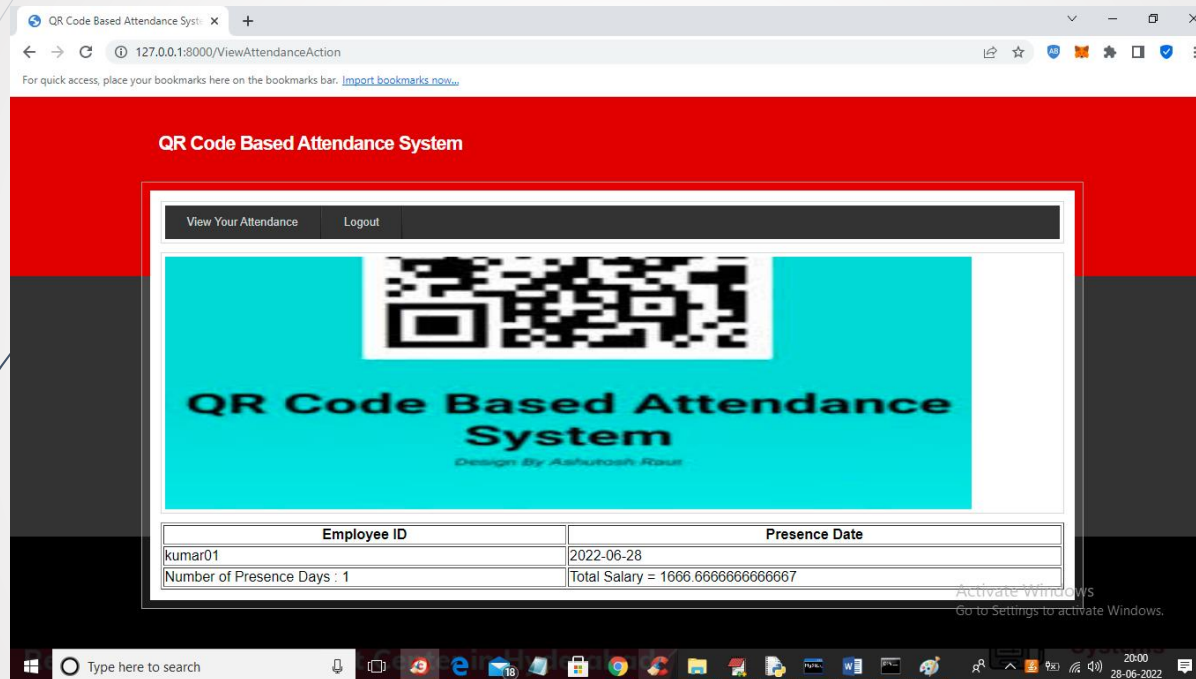
**Enter Details and Train the data**



## Attendance Marking



**Check Attendance whether marked or not using csv File**



**Check Using Multiple data**



## CONCLUSION

- The developed system presented in this paper has been successfully designed and tested.
- The student's attendance status will be analyzed and exported. Attendance monitoring system is very important in our daily life.
- It possesses a really great advantage, among the whole types of code scanning technology, QR Code Based Smart Attendance System is the most accurate. In this project report, we have given an introduction of Attendance monitoring
- system and its advantage. It is an efficient method to store the attendance in the smart phone rather than wasting the paper.

## REFERENCES

- [1] M. Ahmed, S. Spagna, F. Huici, and S. Niccolini. A peek into the future: Predicting the evolution of popularity in user generated content. In Proceedings of the Sixth ACM International Conference on Web Search and Data Mining, WSDM '13, pages 607–616, New York, NY, USA, 2013. ACM.
- [2] P. Bao. Modeling and predicting popularity dynamics via an influencebased self-excited hawkes process. In Proceedings of the 25th ACM International on Conference on Information and Knowledge Management, CIKM '16, pages 1897–1900, New York, NY, USA, 2016. ACM.
- [3] M. Cha, H. Kwak, P. Rodriguez, Y.-Y. Ahn, and S. Moon. Analyzing the video popularity characteristics of large-scale user generated content systems. IEEE/ACM Trans. Netw., 17(5):1357–1370, Oct. 2009.



**THANK YOU**