“Automated Attendance using Python”

OUTLINE OF PRESENTATION

- Introduction
- Purpose of Study
- Problem Statement

Literature review

- Methodology
- Data Collection and Analysis
- Results and Discussion
- Conclusion
- References

INTRODUCTION

Fig. Automated Attendance

Introduction:

- The Attendance Software is basically Developed in computer system which is easy to run this software in Windows as well as in MacOS
- This Freedom to run or operate the software is because we used python Programming Language which is often more reliable that Java or other any programming language
- This Attendance Software is easy & its Designed with a user Friendly Interfece
- The Main purpose of this attendance software is to keep Schools and colleges in keeping track of the attendance of students with in campus

PURPOSE OF THE STUDY

1. Reduce manual process by providing automated and a reliable attendance system using QR code technology.

2. Teacher can easily manage Attendance Using this Automated Process

3. Produce Daily reports for students (Attendance Sheet).

4. Marks Attendance more Accurately in less time.

PROBLEM STATEMENT

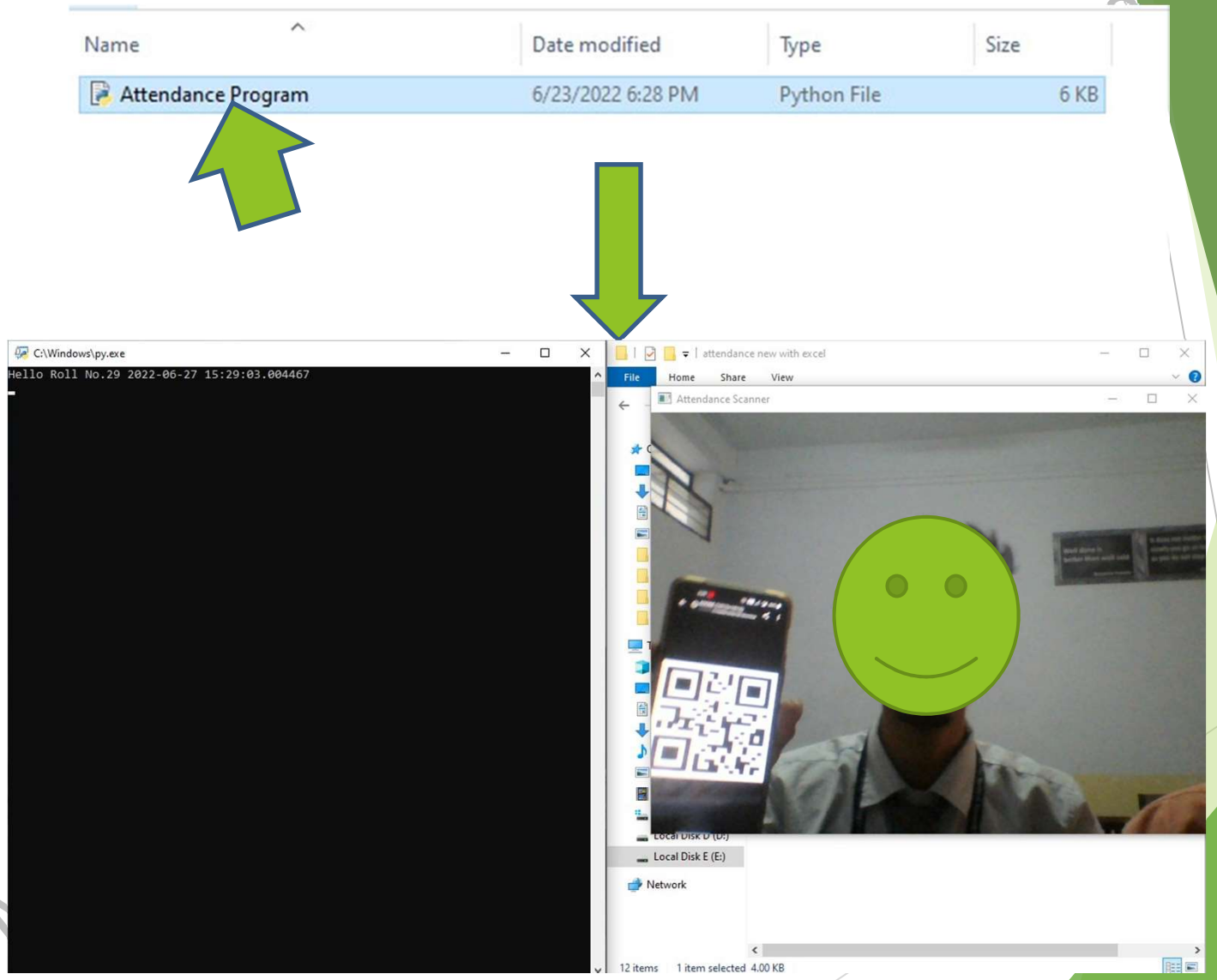
1. To simplify the Traditional way of Attendance using Python…..!
2. To minimize wastage of time for taking Attendance…..!
3. Design Program For Automatic Attendance…!
4. To Develop a Program of Attendance Working Contactless

METHODOLOGY

- Run Program
- Wait till QRCode Scanner Will Open
- Scan QRCode
- Audio Will be Played As
  "Roll no. {value} Present"
- Attendance Will be Marked
- Report Will Be Exported In Excel Excel Sheet

Code:

```
def decoder(image):
    gray_img = cv2.cvtColor(image,0)     #Change Image In backend For Quicker Responce or Quicker Getting scan
    barcode = decode(gray_img)

    for obj in barcode:

        points = obj.polygon
        (x,y,w,h) = obj.rect
        pts = np.array(points, np.int32)
        pts = pts.reshape((-1, 1, 2))
        cv2.polylines(image, [pts], True, (0, 255, 0), 3)

        barcodeData = obj.data.decode("utf-8")
        barcodeType = obj.type
        barcodeDataint = int(barcodeData)
        string = "Hi Roll no. " + str(barcodeData)
        st1= now
        #exc(barcodeData)

        cv2.putText(frame, string, (x,y), cv2.FONT_HERSHEY_SIMPLEX,0.8,(255,0,0), 2)
        file1 = open(dirName+"/attendance.txt","a")
        L = ["Roll No."+barcodeData+" "]
        if barcodeDataint  in roll and not barcodeDataint in rollnop :
                    name=str(roll[barcodeDataint])
                    print("Hello Roll No."+barcodeData+" "+name+now)
                    text = ("Roll Number"+barcodeData+" "+name+" Present")
                    engine.say(text)
                    engine.runAndWait()
                    #time.sleep(5)


                # \n is placed to indicate EOL (End of Line)
        #if barcodeDataint in roll and not in:
                    file1.write("\n")
                    file1.writelines(L)
                    file1.write(now)
                    file1.close()
                    rollnop.append(barcodeDataint)
                   # sheet['E1'] = len(rollnop)
                    #-------------------------------
```


Name
Date modified
Type
Size
Attendance Program
6/23/2022 6:28 PM
Python File
6 KB
C:\Windows\py.exe
Hello Roll No.29 2022-06-27 15:29:03.004467
attendance new with excel
File
Home
Share
View
Attendance Scanner
Local Disk E (E:)
Network
12 items
1 item selected 4.00 KB

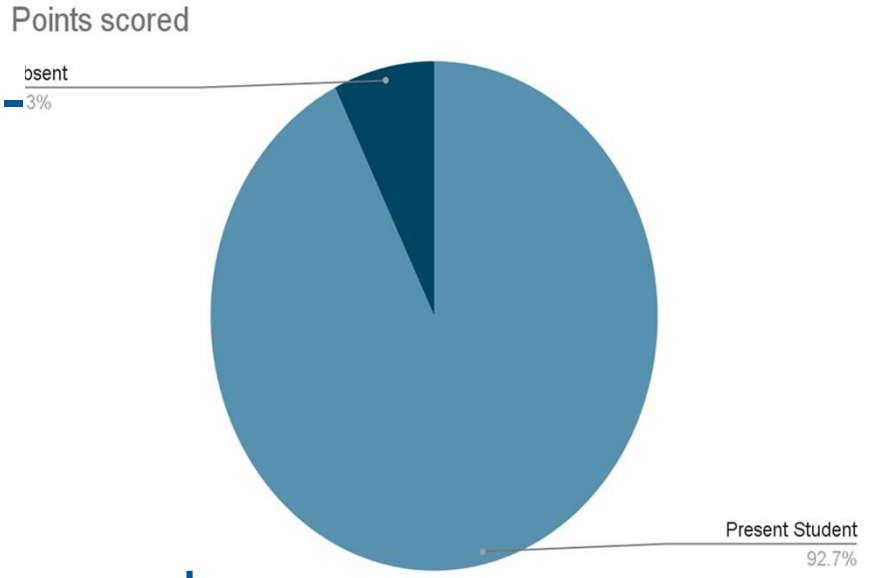
Output Report:

A	B	C	D	E	F	G	H	I	J
Roll No.:	Name:	In Time:	06/29/22	Present Students - 12			Squence Of Student Attendance		
1	Ayushi Bhandari	16:48:16					5 ,8 ,29 ,36 ,41 ,17 ,1 ,40 ,3 ,4 ,6 ,7		
2	Gayatri Chaudhari								
3	Srushti Chaudhary	16:48:29							
4	Sujal Deore	16:48:36							
5	Pawan Desale	16:47:28							
6	Hemant Deshmukh	16:48:56							
7	Vaishnavi Dusane	16:49:05							
8	Naitik Fulfagar	16:47:37							
9	Saee Gadhekar								
10	Payal Gaikwad								
11	Vaibhavi Gangurde								
12	Aditya Jadhav								
13	Rahul Jadhav								
14	Ujjwal Katare								
15	Cancelled								
16	Priti Khaire								
17	Tanmay Khairnar	16:48:07							
18	Rutuja Lomate								
19	Ashwini Mali								
20	Amey Mohole								
21	Parth Pagar								

Data Collection and Analysis

Data collected of student in class:-

a. Roll no.
b. Name



Further **Analysis** of attendance can be done by our report of Excel Exported From our Program

RESULTS AND DISCUSSION

- The System is able to Mange Student Attendance Record Efficiently.
- The Systems is able to facilitate lecturers to collect data and information.
- Lecturers Can Easily monetize the attendance of students
- It Saves Time As Well As Paper

CONCLUSION

1. Our project takes out any plausibility of proxy also keep record of attendance of students in a well viable way. The general project is in charge of attendance of students

2. This project decreases the work load on faculties. The additional focal points is that it is more dependable and the methodology is eco-accommodating as it diminishes paperwork

3. Our Project is very efficient to Avoid contact of Students, As in Covid-19 Crisis we have well understood need of contactless.

REFERENCES

1. Python.
2. OpenCV Documentation.(Camera)
3. Numpy Documentation.(Calculation)
4. Pyzbar Documentation.(QRCode Decode)
5. Pyttsx3 Documentation.(Audio Play)
6. Openpyxl Documentation.(Excel)
7. Excel Documentation.

Future Development

1. On Face Recognition
2. Send Email or SMS
3. More Efficient Working

THANK YOU