

Project Title :- I – Card Based Attendance System

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Summary :-

- ❖ In this project, our primary objective was to streamline the attendance tracking process for students by implementing a sophisticated system that relies on QR codes printed on their identification cards (I-Cards). By doing so, we aimed to eliminate the time-consuming task of manually recording attendance in every lecture by every faculty member.
- ❖ To achieve this, we employed a combination of cutting-edge technologies and libraries. OpenCV, a powerful open-source computer vision library, played a pivotal role in the project as it provided the essential tools for image processing. This allowed us to capture and process images of the QR codes efficiently, ensuring accurate data extraction.
- ❖ The PyZbar library was another critical component of our system. It was employed for the decoding of the QR code data. This library enabled us to interpret the information contained within the QR codes swiftly and accurately, making it an indispensable part of our automated attendance system.
- ❖ Furthermore, we leveraged essential supporting libraries such as NumPy for numerical operations and data manipulation, and VLC for multimedia functionalities. These libraries were essential in ensuring the robustness and functionality of the system.
- ❖ By combining these technologies and libraries, we successfully created an automated attendance tracking system that not only reduces the administrative burden on faculty but also enhances the overall efficiency of attendance management in educational institutions. This project exemplifies the power of technology in simplifying complex and time-consuming processes for the benefit of all stakeholders involved.
- ❖ The Softwares Used in this Project Is Anvil – A opensource platform to make websites using python, Spyder-for running algorithms.

Log In

Email Id

Enter Email Id

Password

Password

LOG IN

Don't Have Account ?

SIGN UP

SIGN UP

NAME

:

Enter Name.....

Roll No

:

Enter Roll Number...

GR No

:

Enter GR Number...

Email ID

:

Enter Email ID...

Password

:

Enter Password....


SIGN IN

```
117143~
Present Student
['92200938063']
Total Presented Student :- 1
```

Spyder (Python 3.11)

File Edit Shell View Help

Result



```

67 print("Present Student")
68 finalList = list(set(present_Student))
69 print(finalList)
70 print(f"Total Presented Student :- {len(finalList)}")
71 f.close()
72

```

Console

Usage

Help Variable Explorer Plots Files

Console 1/A X

```

Python 3.11.3 | packaged by Anaconda, Inc. | (main, Apr 19 2023, 23:46:34)
Python 8.15.0 -- An enhanced Interactive Python.

[1]: runfile('D:/Aryan Data/Usefull Data/Semester - 3/Programming With
Python/Project/Final.py', wdir='D:/Aryan Data/Usefull Data/Semester - 3/
Programming With Python/Project')
Present Student
Total Presented Student :- 0

[2]: runfile('D:/Aryan Data/Usefull Data/Semester - 3/Programming With
Python/Project/Final.py', wdir='D:/Aryan Data/Usefull Data/Semester - 3/
Programming With Python/Project')
143-
Present Student
2200938063']
Total Presented Student :- 1

In [3]: runfile('D:/Aryan Data/Usefull Data/Semester - 3/Programming With
Python/Project/Final.py', wdir='D:/Aryan Data/Usefull Data/Semester - 3/
Programming With Python/Project')

```

IPython Console History


conda (Python 3.11.3) Completions: conda LSP: Python Line 44, Col 1 ASCII CRLF RW Mem 70%

24°C 23:11 04-11-2023

Spyder (Python 3.11)

File Edit Shell View Help

Result



```

54 pts = pts.reshape((-1, 1, 2))
55 cv2.polylines(img, [pts], True, myColor, 5)
56 pts2 = barcode.rect
57 cv2.putText(img, myData[len(myData)-2:], (pts2[0], pts2[1]),
58
59 if cv2.waitKey(1) & 0xFF == ord('q'):
60     break

```

Console

Usage

Help Variable Explorer Plots Files

Console 1/A X

```

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Programming With Python/Project')

```

IPython Console History

conda (Python 3.11.3) Completions: conda LSP: Python Line 44, Col 1 ASCII CRLF RW Mem 67%

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