PyAttendance:-FACE RECOGNITION CLASSROOM BASED ATTENDANCE SYSTEM USINGPYTHON AND AI

A PROJECT REPORT

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BONAFIDE CERTIFICATE

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INTERNAL EXAMINER **EXTERNAL EXAMINER**

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ABSTRACT

The main purpose of this project is to build a face recognition-based attendance monitoring system for educational institution to enhance and upgrade the current attendance system into more efficient and effective as compared to before. The current old system has a lot of ambiguity that caused inaccurate and inefficient of attendance taking. Many problems arise when the authority is unable to enforce the regulation that exist in the old system. The technology working behind will be the face recognition system. The human face is one of the naturaltraits that can uniquely identify an individual. Therefore, it is used to trace identity as the possibilities for a face to deviate or being duplicated is low. In thisproject, face databases will be created to pump data into the recognizer algorithm.Then, during the attendance taking session, faces will be compared against the database to seek for identity. When an individual is identified, its attendance will be taken down automatically saving necessary information into a excel sheet.

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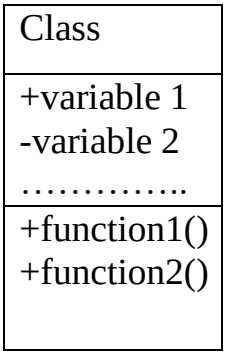
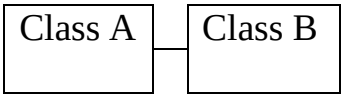
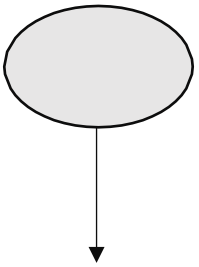
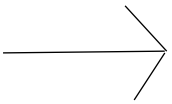
LIST OF FIGURES

LIST OF SYMBOLS

S.NO	NAME	NOTATION	DESCRIPTION
1.	Class		Represents a collection of similar entities grouped together.
2.	Association		Association represents relationship between classes.
3.	Actor		Interaction between the system andexternal environment.
4.	Aggregation		It aggregates several classes into single classes.
5.	Use Case		Interaction between the system and external environment.

6.	Initial State		Initial state of object
7.	Relation		Extends relationships is used when one use case is similar to another use case but does a bit more.
8.	Communication		Communication between various use cases.
9.	State		State of the process.
10.	Final State		Final State of the object.
11.	Control Flow		Represents various control flow between the states.

LIST OF ABBREVIATION

ABBREVIATION	EXPLANTION
FRAS	Face Recognition Attendance System
FRT	Face Recognition Technology
OpenCV	Open Source Computer Vision Library
CSV	Comma Separated Value
IDE	Integrated Development Environment