SMART ATTENDANCE

DBMS PROJECT 2015

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ABSTRACT

THE IDEA IN BRIEF

Attendance Monitoring is a monotonous though important exercise performed by students and teachers every day. Moreover, reliability over a manual system is always in serious doubt! In this project we present a simple system which uses face recognition to mark a student's presence.

Further, we can query over the database to check if a student's attendance is over a particular limit or not. Thus, it automates and simplifies the process of attendance management.

TECHNOLOGIES USED

1. **OpenCV C++** libraries to implement Face Recognition.
2. **Qt C++** for the GUI and backend processing.
3. **Sqlite** for managing the Database.

HIGHLIGHTS AND NOVELTY

It includes open text fields for the administrator to simplify writing the queries. It also includes a "Write your own Query" box, so that a user can customize queries to generate output as per the needs.

It also, considers the fact if a student leaves a class within 40 minutes, his attendance is not marked. It notes the time when a student enters the class and leaves it and marks his attendance in the classes scheduled in that time slot.

Thus, it relieves students and teachers of marking attendance and helps prevent proxies. An automatic system makes it easier to find critical data like number of classes attended by a student of a particular subject by a particular professor, etc.

LOOKING AHEAD

The project is in Alpha version currently. Once it passes Beta testing, it can implemented at various locations around our own campus, maybe starting with our Computer Engineering Department!

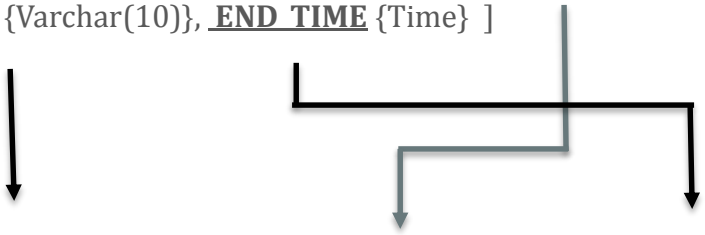
RELATIONAL SCHEMA

TABLES

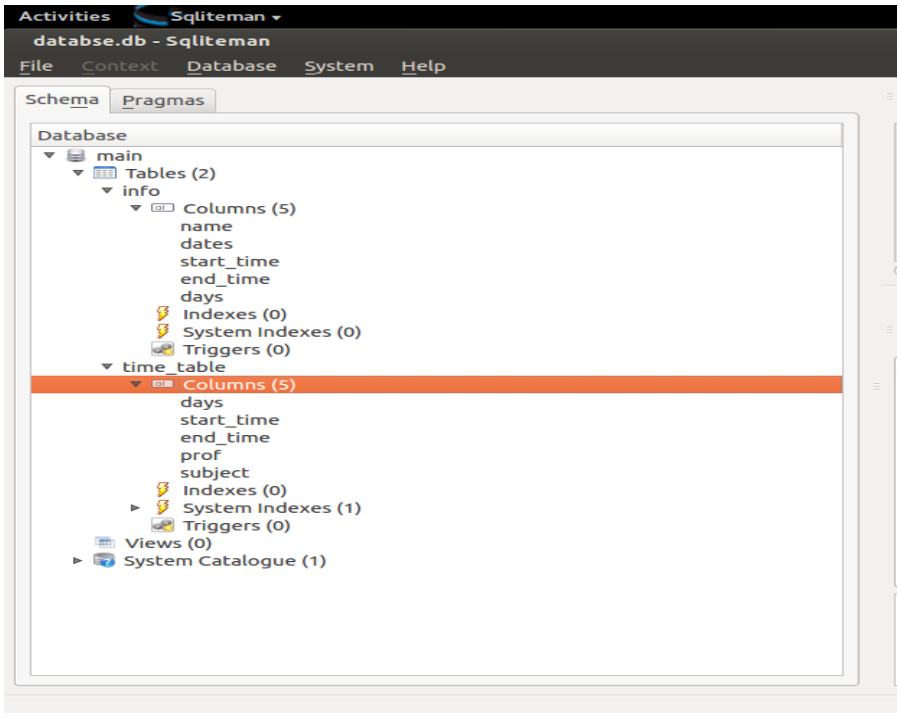
INFO: Used to store daily information of students.

TIME_TABLE: A table to record the current Time Table for a particular division.

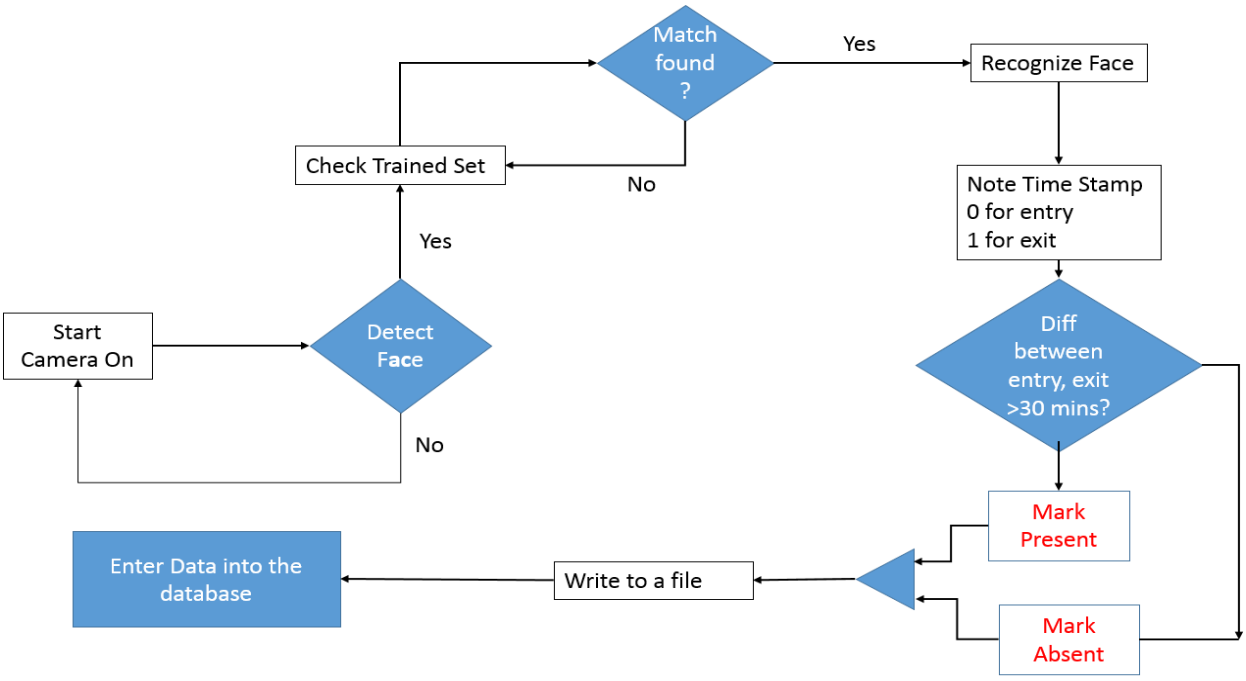
INFO [NAME {Varchar (10)}, DATE {Date} , **START_TIME** {Time} , **DAYS** {Varchar(10)}, **END_TIME** {Time}]

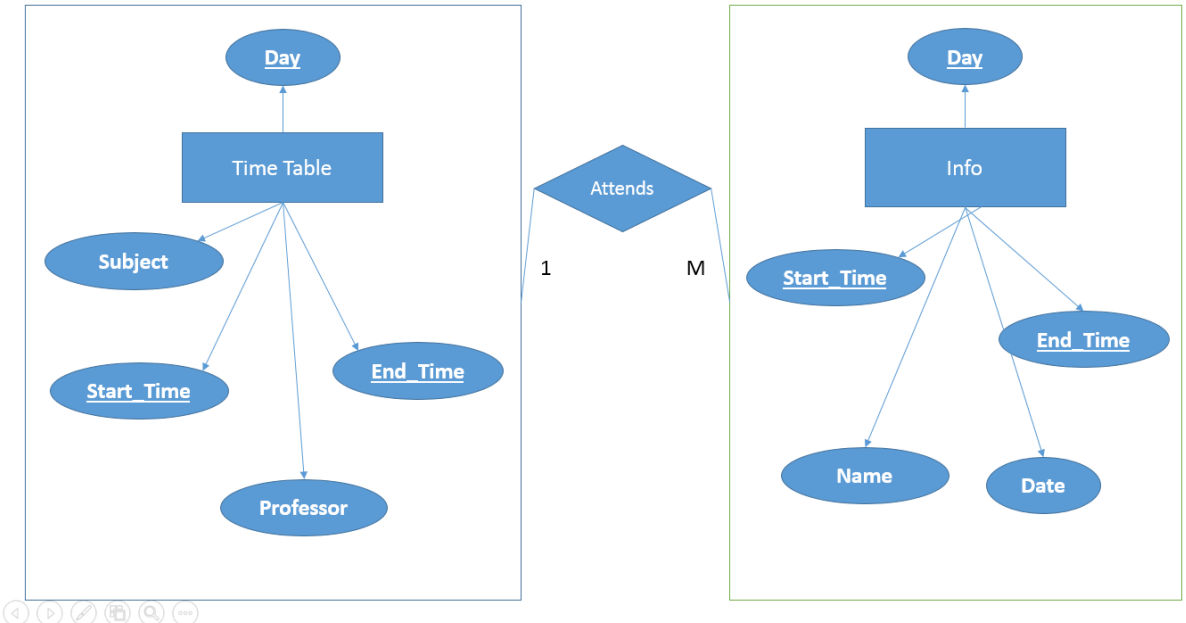


TIME_TABLE [**DAYS {Varchar(10)}**, **START_TIME{Time}**, **END_TIME {Time}**, PROFESSOR {Varchar(10)}, SUBJECT {Varchar(10)}]



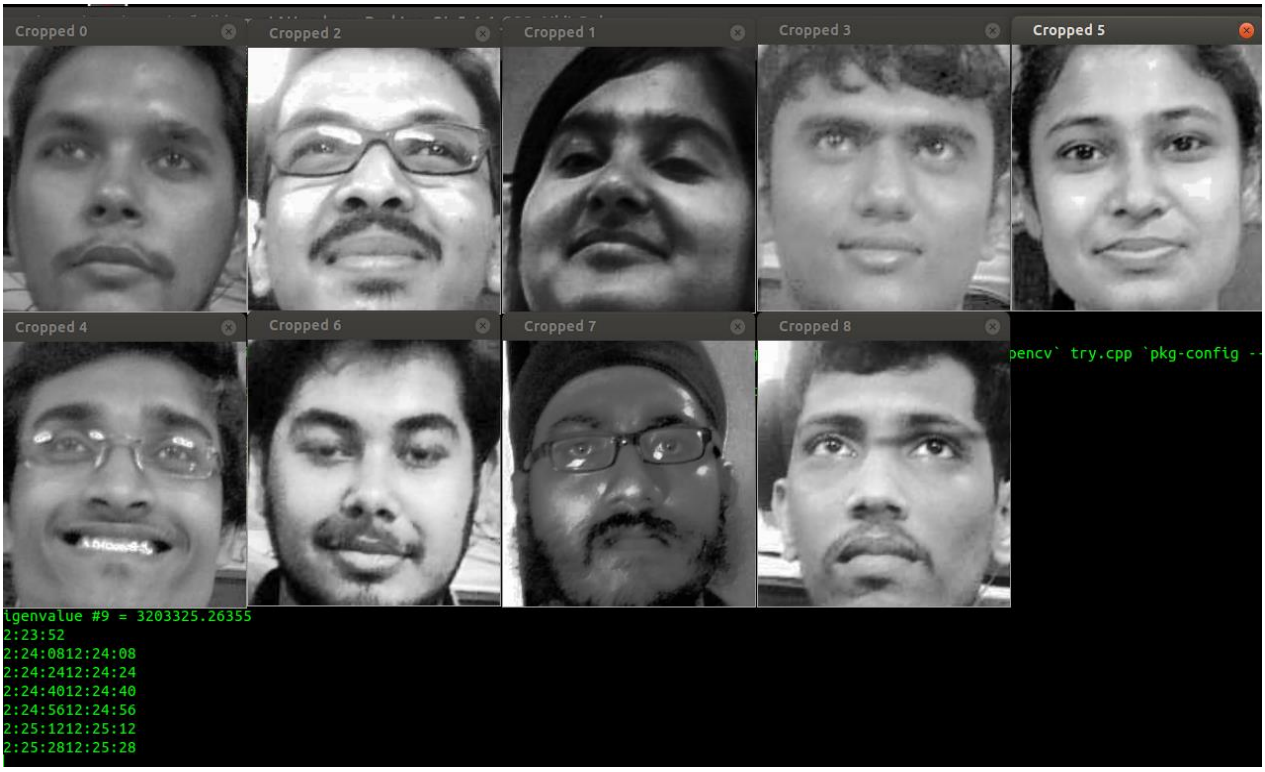
PROCESS FLOW AND ER MODEL





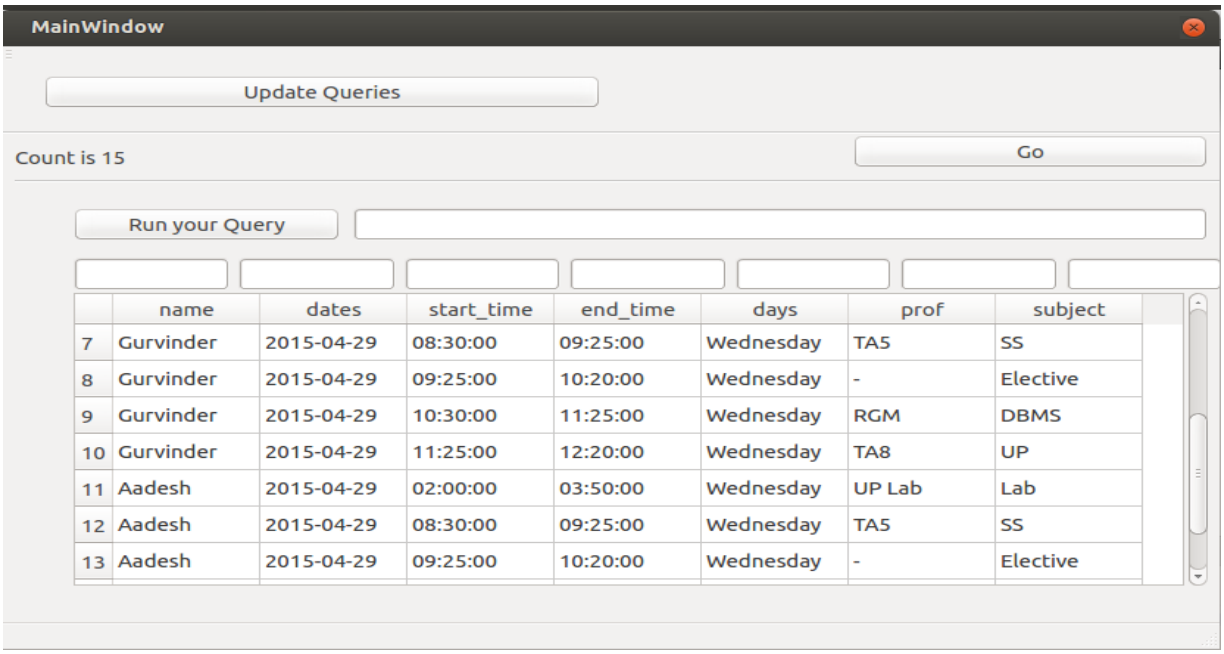
SCREEN SHOTS

Training in Progress



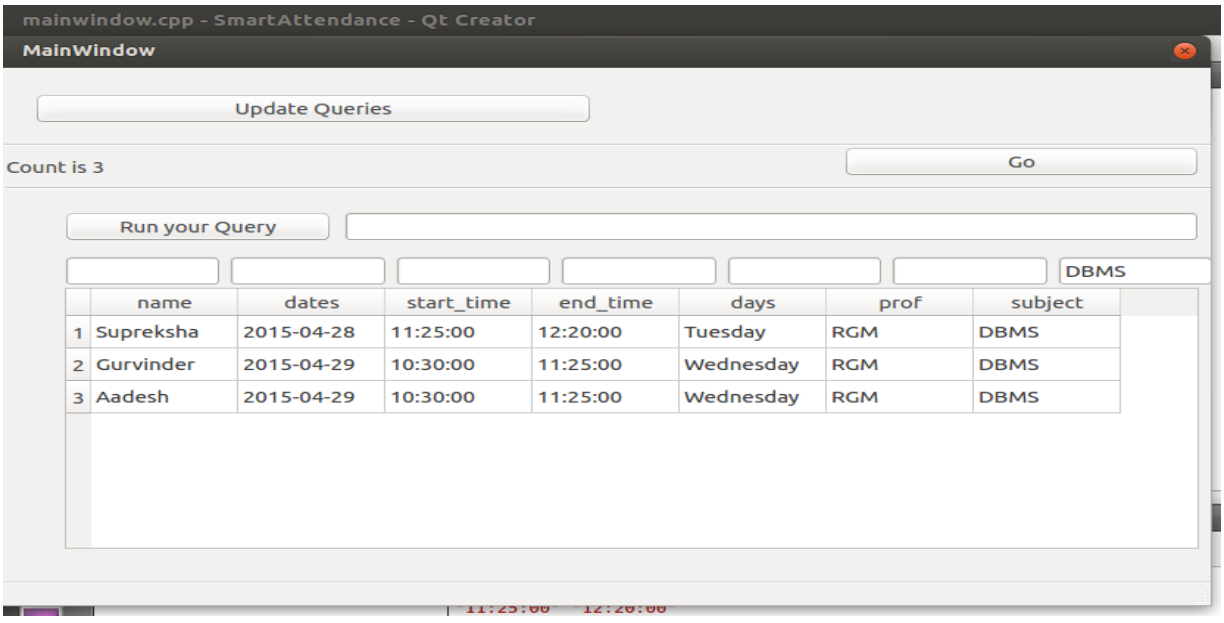
SCREEN SHOTS

Displaying all Queries without any filter



	name	dates	start_time	end_time	days	prof	subject
7	Gurvinder	2015-04-29	08:30:00	09:25:00	Wednesday	TA5	SS
8	Gurvinder	2015-04-29	09:25:00	10:20:00	Wednesday	-	Elective
9	Gurvinder	2015-04-29	10:30:00	11:25:00	Wednesday	RGM	DBMS
10	Gurvinder	2015-04-29	11:25:00	12:20:00	Wednesday	TA8	UP
11	Aadesh	2015-04-29	02:00:00	03:50:00	Wednesday	UP Lab	Lab
12	Aadesh	2015-04-29	08:30:00	09:25:00	Wednesday	TA5	SS
13	Aadesh	2015-04-29	09:25:00	10:20:00	Wednesday	-	Elective

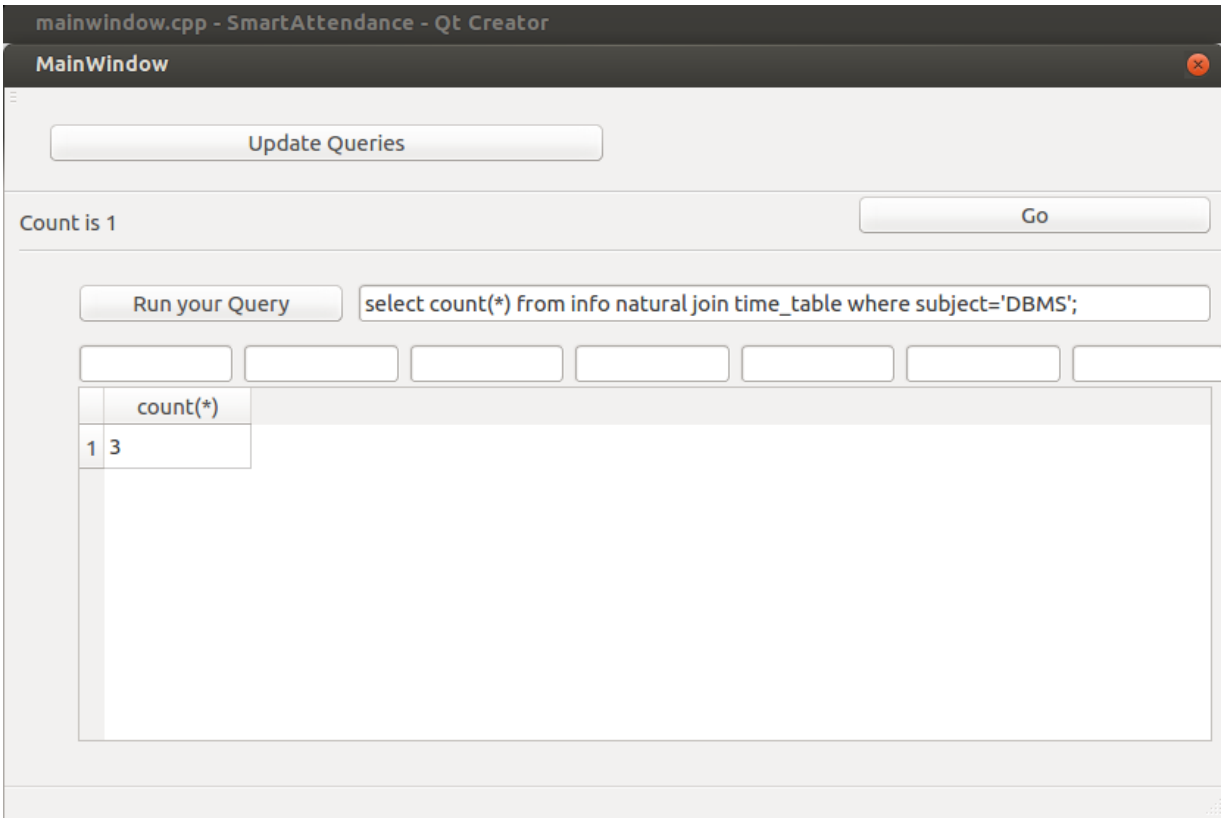
Queries with Filter (Automatic)



	name	dates	start_time	end_time	days	prof	subject
1	Supreksha	2015-04-28	11:25:00	12:20:00	Tuesday	RGM	DBMS
2	Gurvinder	2015-04-29	10:30:00	11:25:00	Wednesday	RGM	DBMS
3	Aadesh	2015-04-29	10:30:00	11:25:00	Wednesday	RGM	DBMS

SCREEN SHOTS

Queries with Filter (Manual)



A Project By: