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CLASS MANAGEMENT SYSTEM

Submitted By

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Chapter 1

INTRODUCTION

The title of the project is "CLASS MANAGEMENT SYSTEM (CMS), CMS is defined as an application based on Internet that aims to all the levels of management providing information within an organization. This system can be used as a information management system for the college. For a given student/staff (Technical) the Administrator creates login id & password, using these student/ staff (Technical) can access the system to either upload or download some information from the database. The project is divided into 6 scenarios, cacli scenario can be developed independently.

Android OS is the most user-friendly and programmer friendly platform. Android is an Operating System supporting a large number of applications in smart phones. These applications make life more comfortable and advanced for the users. This application mainly aims to minimize the difficulties that the students face in managing and planning their academic life.

The primary purpose of teaching is to impact knowledge. However, two factors can facilitate this objective. One is having a simplified and well explained course material and the other is ensuring its effective delivery. A well managed classroom will guarantee effective delivery. Many works have been done in the area of preparing course material but less has been done in effective virtual classroom management. Virtual classroom is a product of necessity. It evolved out of the need to cater for the high demand for education and learning in the twenty-first century and succumbing several challenges associated to traditional classroom learning. It offers a range of possibilities such

as personalization, studying where and when the students can.

- This project is an software interface between students, parents and faculty.
- This innovative system allows college faculty to share important data as well as notifications with engineering/non-engineering students.
- Il consists of a faculty login along with student login & parent login.

- Even though most college administrative work has been computerized, the lecture timetable scheduling is still mostly done manually due to its inherent difficulties

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Fig. 1.1: Classroom Management System

Classroom management is crucial in classrooms because it supports the proper execution of curriculum development, developing best teaching practices, and putting them into action. Classroom management can be explained as the actions and directions that teachers use to create a successful learning environment; indeed, having a positive impact on students achieving given learning requirements and goals. In an effort to ensure all students receive the best education it would seem beneficial for educator programs to spend more time and effort in ensuring educators and instructors are well versed in classroom management.

The database can digitally store more information about users in less space and in very less time the very basic principle behind the necessity automated college online admission system is peaceful observation of institutes. This tool can easily store the details of students such as fee details, documents details and admission details. This Snident Database has been designed taking considering the practical needs to manage a Students data. Its design focuses on 2 types of users: Admin Students

The Database follows a unique event flow developed for such a system Communication between the student/parents and the institution management is the sole purpose of this software along with reducing the paper work to some extent. This system benefits the administrator to access and verify the information of students. This Automated Online College Admission Management system benefits the administrator as he

can send pushing notifications and make announcements which are directly received by the students and parents. The concept of Personal Registration Number or PRN is also included using which the each student gets one inimitable Identification This id will help in future to access information or find student among several students of the college.

Class Management System is a software application which maintains records of the students, Candidates, Users. This software is planned for, the event creation to take feedback from students for any event happen in the department. It is a complete online project, for a firm to run it successfully. It is compulsory to take feedback from clients.

The system utilizes user authentication, displaying only information necessary for an individual's duties. Additionally, each sub-system has authentication allowing authorized users to create or update information in that subsystem. All data is thoroughly reviewed and validated on the server before actual record alteration occurs. In addition to a staff user interface, the system plans for student user interface, allowing users to access information and submit requests online thus reducing processing time. All data is stored securely on SQL servers managed by the college administrator and ensures highest possible level of security. The system features a complex logging system to track all users' access and ensure conformity to data access guidelines and is expected to increase the efficiency of the college's record management thereby decreasing the work hours needed to access and deliver student records to users.

1.1 Motivation

As a man-machine system that utilizes computer software & hardware resources and database, MIS (Management Information System) can provide information to support the operation, management and decision-making functions of enterprises or organizations. With the continuous scale expansion of colleges and universities, the number of students has increased. In the face of huge amount of information, it is required to possess the student information management system to improve the efficiency of student management. Through this system, the standardized management, scientific statistics and fast query of student information can be realized, and thus the workload of management can be reduced. In this paper, a typical student information management system will be established to realize the systematization, standardization and automation of student information relationship.

1.2 Objectives

- Objective of this product is to provide interaction between students and
- Teachers The application provides all the related information of the faculty like their personal details, lecture time, feedback details and so on.
- Scheduling classes: The system also maintain timetable of all the lectures being conducted every day.
- Notifications: The system regularly notifies the teachers about lecture time and student gets the notification about the useful events

1.3 Scope of Work

- The classroom management system can be enhanced to include some
- other functionalities like marks, attendance, event, feedback management Networking can also be

added wherein student can interact with faculty.

- Functionality and text message can be added.

Organization of rest of the chapters are as follows

Chapter 2 describes the literature survey of papers thoroughly that what kind of methods they have used for their work by using various techniques. Every paper use different techniques to create their own efficiency with existing one. And thus we have st e surveyed every existing work.

Chapter 3 describes the design if proposed system and what are the methods and techniques is used to understand the design completely. The detail information about the methods are described in the chapter and how the flow of proposed system goes is shown using the flow chart of proposed system

Chapter 4 describes the complete result analysis of the proposed work showing the showing the accurate as well as incorrect results. And how the system is efficient compared to previous work is explained.

Chapter 5 describes about the conclusion of our project showing all the positive as well as negative sides of our proposed work. It also describes the future scope of our project.

1.2 Need of project

The purpose of this project was to present first year teachers with information that will enhance their development in classroom management. This is presented in the form of a guidebook. Effective learning environments are examined and discussed. In addition, the author discusses the benefits of learning classroom management skills in order to establish a basis for years of potential career satisfaction

Chapter 2

LITERATURE REVIEW

The system provides guidance to the admin to keep track of each student. The admin has the access to the database of system. In an educational institute management is crucial thing. So in order to reduce the efforts of stuff we are introducing our system The system comes on with much functionality like event details, feedback, attendance

(Liangqiu MENG, IEEE 2016)In this paper, we propose a design for college student management system utilizing computer aided system, which can play an important role in college management. Firstly, we organize our proposed college student management system via a hierarchical structure, which contains (1) Web display layer, (2) Business logic layer, (3) Data access layer, and (4) Database layer. [1]

(Tanvi Jadhav, Raashi Gupta, 2015, UJARCSSE)In this paper, we have attempted to create an application which will help students to avoid these mistakes. Apart from this, the application also helps the students to create and share notes that were given by professors. This paper introduces system concept and design principles of Academic Scheduler with emphasis on modular implementation of this android application. [2]

(Maosheng Wu, Ximeng Wu,IEEE 2011)In this paper, First the system structure and principle are discussed. After that, the function and design method of each software and hardware modules are introduced in detailed. Finally, the advantages of this system are summarized. [3]

(FU Yue, IEEE 2016) In this paper, a typical student information management system will be established to realize the systematization, standardization and automation of student information relationship. [4]

(May Britt Postholm, 16 November 2015) In this paper, the Classroom Management System focuses on the project work method and the teacher's leader role in a lower

secondary school. The purpose of this paper is to show how the project-work method may provide teaching that is varied, practical, and challenging. Moreover, another aim is to highlight the teacher's role as the leader of pupil learning in project work [5]

(Yin Guangli, IEEE 2012) This paper discuss exist some of the current teaching management systems, according to theoretical system based on service oriented architecture, we propose a sort of architecture and hierarchical model SOA based about academic management system, develop a integrated platform of teaching information system on web service of J2EE-based [6]

(Amja Chowdhary1, Priyanka Kakde2, Shruti Dhoke3, Sonali Ingle4, Rupal Rushiya5, Dinesh Gawande6, 2014, IJCSMC)This paper introduces a practical timetabling algorithm capable of taking care of both strong and weak constraints effectively, used in an automated timetabling system. So that each teacher and student can view their timetable once they are finalized for a given semester but they can't edit them. Timetable Generation System generates timetable for each class and teacher, in keeping with the availability calendar of teachers, availability and capacity of physical resources and rules applicable at different classes, semesters, teachers and subjects level.[7]

(Anirudha Nanda, Manisha P. Pai, and Abhijeet Gole, International Journal of Machine Learning and Computing, Vol. 2, No. 4, August 2012)This paper proposes a general solution for the School timetabling problem. Most heuristic proposed earlier approaches the problem from the students' point of view. This solution, however, works from the teachers' point of view ie. teacher availability for a given time slot. While all the hard constraints (e.g. the availability of teachers, etc.) are resolved rigorously, the scheduling solution presented in this report is an adaptive one, with a primary aim to solve the issue of clashes of lectures and subjects, pertaining to teachers. [8]

Summary of the exact matching techniques based on tree search is given in Table 2.1 (a).

Table 2.1(a): Exact matching techniques based on tree search

Authors / Reference no.	Concept used	Data-base used	Performance evaluation parameter	Claims by the concerned author(s)	Our findings
Ullman [4].	Subgraph isomorphism, depth first tree search.	NA	Time.	Reduction in the time used for determining isomorphism.	Works more quickly on sparser graphs but slows down as the size of thegraph increases.
L. P. Cordella et al. [5].	Subgraph isomorphism, Attributed relational graph.	NA	Time.	The authors claimed that their algorithm works significantly better than the Ullman's algorithm.	Comparing semantic information may give better results than matching the topology of thegraph.
L. P. Cordella et al. [6].	Graph isomorphism and subgraph isomorphism.	Own	Time and space.	Reduced computational complexity, deals with large graphs	Less efficient for randomly connected graphs, which do not exhibit a regular structure.

2.1 Motivation

A review of literature shows that a classroom management approach is needed to maintain positive student behavior. Studies have also shown that classroom rules have a significant effect on student behavior. Therefore, teachers that have effective classroom rules incorporated into their classroom management plan will have more success in maintaining positive student behavior.

Chapter 3

IDENTIFICATION OF PROBLEM

This chapter, firstly, discusses the analysis of the identified problem and latter presents the mathematical formulation of the identified problem of matching, graph construction for images.

3.1 Problem Analysis

Graph matching has application in various fields such as pattern recognition, image retrieval, case-based reasoning, machine learning, planning, semantic networks, conceptual graph, and monitoring of computer.

Matching graph construction for images involves the creation of graphs for the images and latter, the development of the graph matching algorithm or approach. Representation of the image, by means of the graph, involves the setting up of the means to represent the images by nodes and edges. Here, the nodes and edges can be identified by identifying the image attributes such as the segmented regions, their properties, their connectivity strengths with neighborhood regions, colors and texture properties of the region, etc.

In this identified problem, the role aim is to identify the segmented regions and their attributes. Based on this, the graph is constructed. Latter, the graph matching mechanism is developed to match two different graphs.

3.2 Objectives

This study was focused on the following objectives:

1. To describe how behavior theorists influenced class room management.
2. To identify approaches for managing student behavior.
3. To determine criteria for creating well-designed rules.
4. To identify steps for planning a rule management concept.

4. Methodology

The system features a complex logging system to track all users' access and ensure conformity to data access guidelines and is expected to increase the efficiency of the college's record management thereby decreasing the work hours needed to access and deliver student records to users.

4.1 Focal Points

- Complete specification of the system (with appropriate assumptions) including the framing of timetable policy.
- A database should be created. As per the rules taken for the purpose of maintaining the records
- Listing down all possible scenarios and then coming up with flow-charts or pseudo code to handle the scenario.
- Creation of the code based on the flow charts or pseudo code created.
- The system should be thoroughly tested by running all the test cases written for the system.

3.2 Algorithm

Timetabling Generating Algorithm

If(daycount>n)
end
generate()
Lbl2:For day clash_element 1 today clash element n
Retrieve sde from dayclash Retrieve ide of sdc
rehabilitate(sde)
For(ts] to tsn)
If(si exists in final tt)
Next iteration
The
LM3 Retrieves in
vailability for buy rehabilitate(s)
Else
Set si to tsi in final t
If (t has been reached)
If clash NOT empty)
For clash elel to clash elen Retrieve each si inclash_elen
Retrieve si with ti
rehabilitate(s) Daycount++
Else
Daycount++
Else
Continue generate() For (each subject si) Place si in sub arr For(each dow)
rand_seq rand(sub arr) if(dow-1) inil it (dow)-rand_seq
else
curr pos-length(rand_seq)-1 temp_ele rand_seq(last) for (each element in rand_seq)
if(curr_pos-1)
rand seq(carr postemp ele
else
rand_seq(curr_pos)-rand_seq(curr_pos-1)
init_(dow)-rand_seq
End generate rehabilitate(s) 1b14 Retrieve tsj such that ti availability-1
Moves to Clash
Set ti si in tsj in final t
else
Lb14
Else if(tsfj-1)
Lb14
Else Ifall is-1)
Mark s

Move sj to Dayclash

End rehabilitate

(Anirudha Nanda, Manisha P. Pai, and Abhijeet Gole, International Journal of Learning and Computing, Vol. 2, No. 4, August 2012)

Following are the results of the implementation of the algorithm mentioned above

- The algorithm after implementation, results in the creation of a time table of batch class of students displaying a grid of time slots
- Each time slot is filled by a teacher and the subject that is being conducted
- The output of the algorithm's implementation will be as per the above

- The allotments of teachers to the slots will change the composition of the
- generated time table

- Hence, all clashes of availability of teachers will be analyzed and the algorithm will be applied again to improve by reducing the clashes

3.3 Flowchart

Image

Image

Image

Fig. 3.1: Architecture of Classroom Management System

The above figure shows the flow between the classroom management system. It contains the modules like timetable, assignment, feedback, event, parents meet notification, attendance. It explains the overall procedure of getting the assignment, filling the feedback form, also the information about the events happening in the college.

4. Design and Calculation

The design and implementation of a comprehensive Online College Management System and user interface is to replace the current paper records. College Staff are able to directly access all aspects of a student's academic progress through a secure, online interface embedded in the college's website. The system utilizes user authentication, displaying only information necessary for an individual's duties. Additionally, each sub-system has authentication allowing authorized users to create or update information in that subsystem

4.1 Designing

The design of the Class Management System includes the design of the home page which provides the way for all students and other user to access the CMS. Every user of the CMS has a unique username and password. The home page mainly contains a login form through which a new user can register, or an existing user can login to the system by entering the username and password

Image

Image

Fig. 4.1: Proposed Architecture for CMS System

1. ADMINISTRATOR

The administrator is responsible for entering the new student and managing the student Accounts. The administrator also manages the faulty accounts like entering a new faculty assigning the faculty to the subjects. The Administrator also updates the college related information about events that occur in the college. The Administrator also updates student's attendance and also their assignment. The administrator will check all the updates i.e. student updates faculty, updates, assignment updates etc. The administrator has the highest level of power in the class management system

2. FACULTY

The staff can update the information regarding the student's attendance, internal marks of the students and any information regarding the subjects they handle. They can also view the student details for better understanding the student performance and improving the efficiency of the student's attendance. The staff also gets the updates from the college regarding any events occurring in the college.

3. STUDENT

The student is of centre focus, because in every college student plays the very important role. Student can access the information of the college, subject details, assignment, events, feedback information. The course details include information regarding branch he is studying, the academic curriculum of the college, year wise subject offered by the branch, the subject details include the syllabus of the subjects, information regarding the staff handling the subjects, the subjects he presently registered for the semester he is presently studying, attendance and internal marks of the subjects, he can also ask any queries to the staff regarding the subjects.

Image

Image

Image

Screenshot 4.1 IP Address of Server

Above screenshot displays the IP address of the server needed for establishing the communication between the teacher, student, and parent login side.

Image

Image

Image

Screenshot 4,3 Registration of admin

The above screenshot displays the registration of admin. For that purpose, teacher should have their unique id and password

Image

Image

Image

Screenshot 4.4 Dashboard of CMS

The screenshot displays the dashboard of our application. It contains 9 entities viz. masters, student add, manage event, feedback record, timetable, parent notification, staff registration, account, exit. It also contains the sub dashboard having total admission, events, and enquiry. It also displays the total no. of events, students, assignments and the staff

4.2 REQUIREMENT ANALYSIS

- The basic requirements for the design of the CMS are
- Every user should have their own identity Login facility
- User can update his/her personal information and can view the assignment, events, feedback etc
- Faculty and admin sections can update any of the information.

4.3 DATABASE DESIGN PROCESS

It is fair to say that database play a critical role in almost all areas where computers are used, including business, electronic commerce, engineering, medicine, law, education, and library science. A database is collection of a related data.

A database has the following implicit properties.

A database represents some aspect of the real world, sometimes called the mini-world or the Universe of Discourse (UOD) changes to the mini world are reflected in the database.

- A database is a logically coherent collection of data with some inherent meaning. A random assortment of data cannot correctly be referred to as a database
- A is designed, built, and populated with data for a specific purpose. It is an intended group of users and some preconceived application which these users are interested.

Database Management System (DBMS) is a collection of programs that enables users to create and maintain a database. DBMS is a general purpose software system that facilitates the process of defining, constructing, manipulating, and sharing database among various users and applications. Defining a database involves the specifying the data types, structures, and constraints of the data to be stored in the database. The database definition or descriptive information is also stored in the database in the form

of dictionary, it is called Meta data constructing the database is the process of storing the data on the storage medium that is controlled by the DBMS

Manipulating a database includes functions such as querying the database to retrieve specific data, updating the database to reflect in the mini-world, and generating reports from the data. Sharing a database allows a multiple users and programs to access the database simultaneously

Application program accesses the database by sending queries or request for data to the DBMS. A query typically causes some data to be retrieved; a transaction may cause some data to be read and some data to be written into the database.

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Chapter 4
METHODOLOGY

This chapter gives elaboration on the proposed approach. The discussion starts with the block schematic representation of the proposed approach, followed by the detailed discussion on the proposed approach, which involves the procedure for creation of the graph, pseudo code for matching the graphs and pseudo code for matching the graphs.

4.1 Working Principle

Matching graph construction for images involves the creation of graphs for the images and latter, the development of the graph matching algorithm or approach. Representation of the image, by means of the graph, involves the setting up of the means to represent the images by nodes and edges.

4.2 Processes

Figure 4.1 shows the schematic overview of the proposed approach. The working of the proposed approach is divided into two main steps, creation of graphs from images and matchinggraphs.

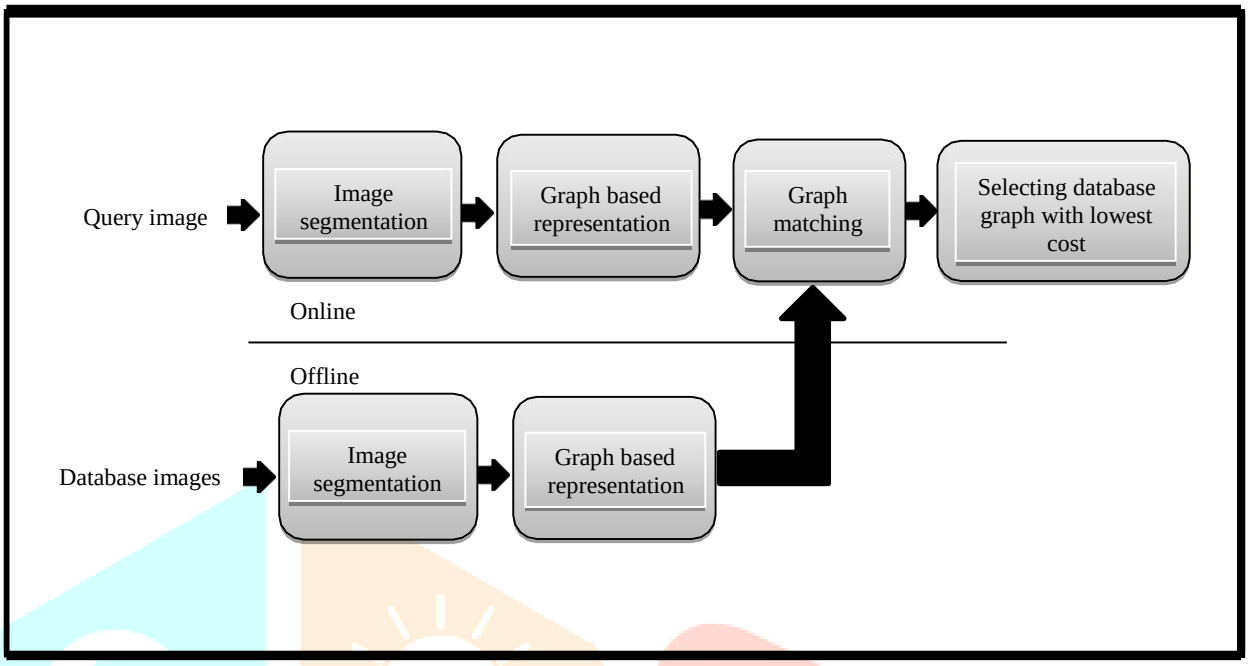


Figure 4.1: Block diagram of the proposed approach

4.3 Components & ConstructionalDetails

This assertive approach can be modified to fit any classroom setting. For example, Dial (Gut off, 1998) who is a middle school band teacher, used an assertive approach to control behavior in his music class. He began the school year with a written contract which the student and parents signed. He set his classroom behavior expectations at the start of the year, giving both student and parents a clear, firm message to begin the year positively. Dial (as cited in Gut off, 1998, p.4) offered 10 tips for establishing harmony in theclassroom.

1. -Limit idle time-keep routine consistent by having immediate activitiesready.
2. - Let kids help make rules - this give the student's ownership to therules.
3. -Make parents allies - parents are more likely to reinforce your expectations for good student behavior if you establish tiesearly.
4. -Spell it out in writing - list specific behaviors in a behaviorcontract.
5. -Give respect to get respect - when you treat students with respect, you get it back.
6. -Model the behavior you want - don't just tellthem.15
7. -Get up and move around - move around the room to see what is goingon.
8. -Structure play at recess - where playtime is carefullysupervised.
9. -Bring kids to order quickly - non-verbal signals can be used to quiet students quickly.
10. -Praise the behavior you want - acknowledge and praise good behavior wheneverpossible

Chapter 5

CALCULATION AND SPECIFICATION

This chapter discusses the results of the experimentation carried out in order to match the graphs of the images along with a brief summary on the MATLAB tool that has been used for the experimentation purpose. Further, a brief discussion is done on the obtained results.

5.1 Experimental Setup

Experimentation is carried out by using a collection of 50 images. All the experiments are carried out in MATLAB tool. System configuration used for the experimentation is as follows:

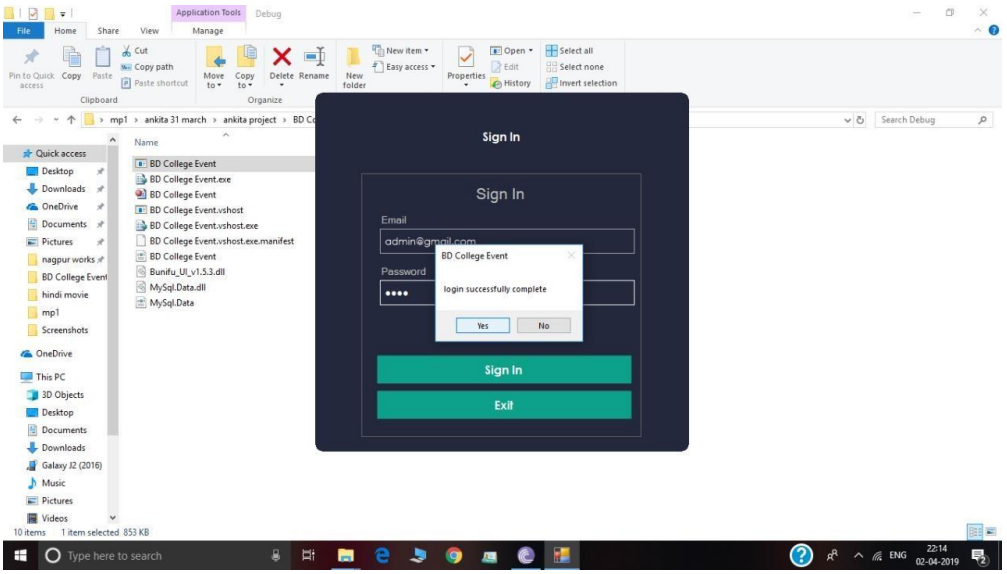
- **HardwareSpecification:**
  - Processor: Intel(R) Core(TM) i3-2350M CPU @ 2.30GHz, 2300 Mhz, 2 Core(s), 4 LogicalProcessor(s)
  - RAM :4GB
- **SoftwareSpecification:**
  - MS Windows7
  - MATLAB R2013a version 8.0.1.604

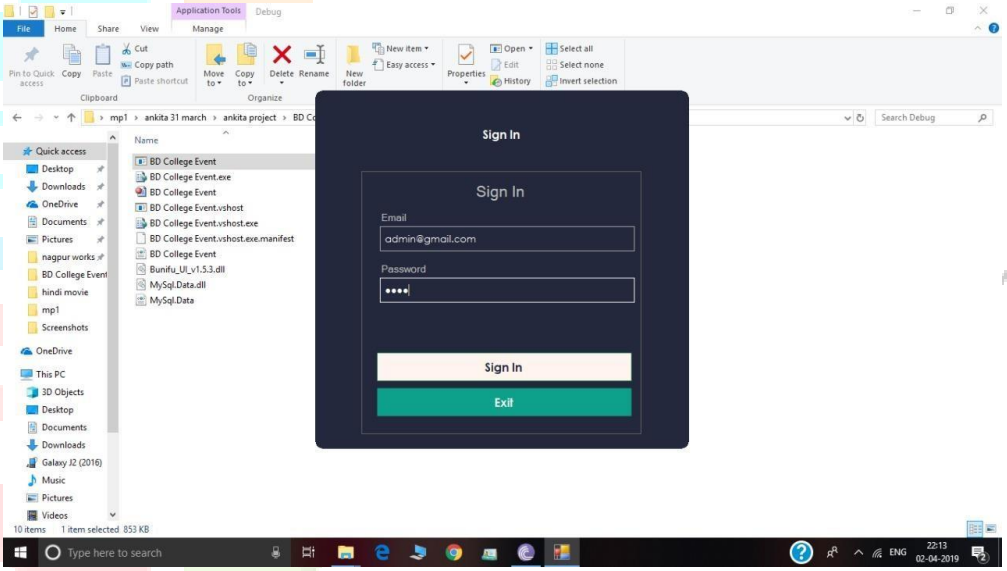
5.1.1 Introduction toMATLAB

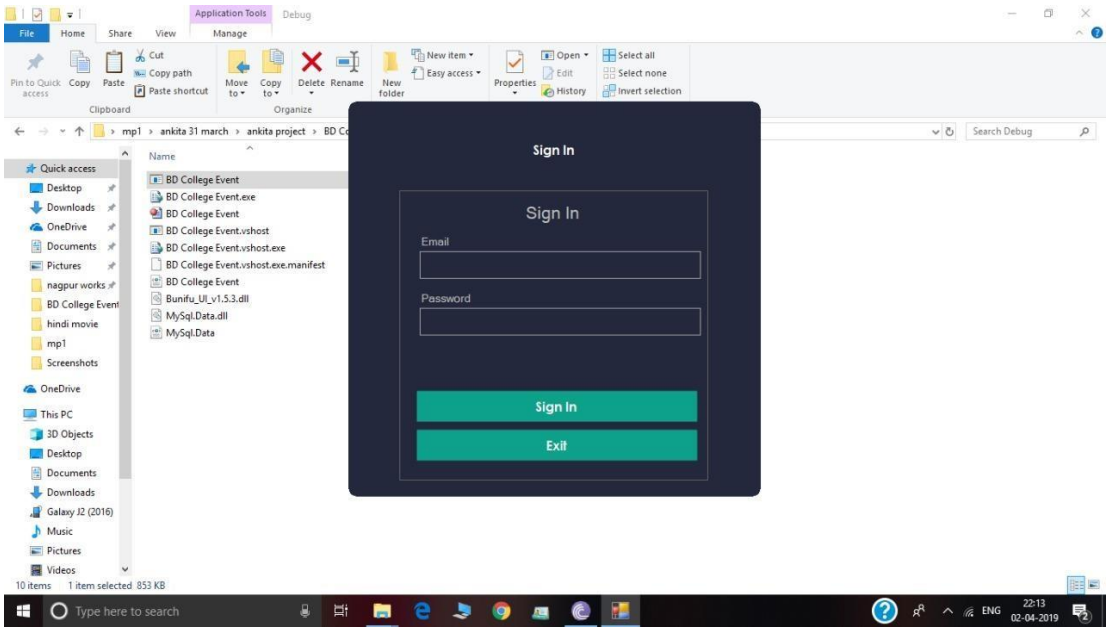
MATLAB is a high-performance language used for technical computing. It integrates computation, visualization, and programming in an easy-to-use environment where problems and solutions are expressed in familiar mathematical notation. Typical uses include:

- MathematicalComputations
- Algorithmdevelopment
- Modeling, simulation, andprototyping

5.2 Experimental Results






Sign In
Sign In
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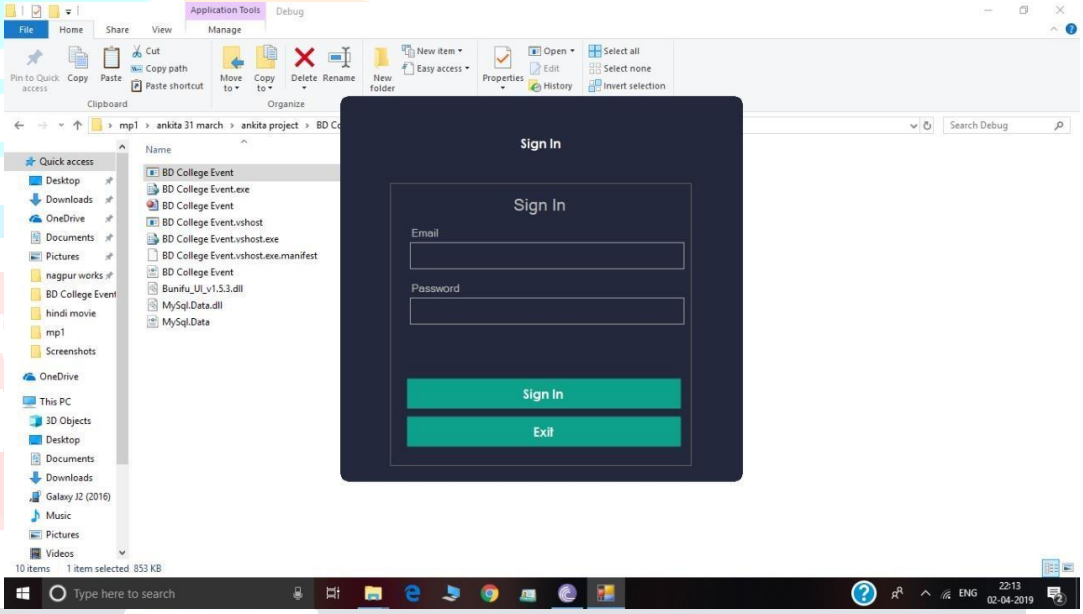
Password
Sign In
Exit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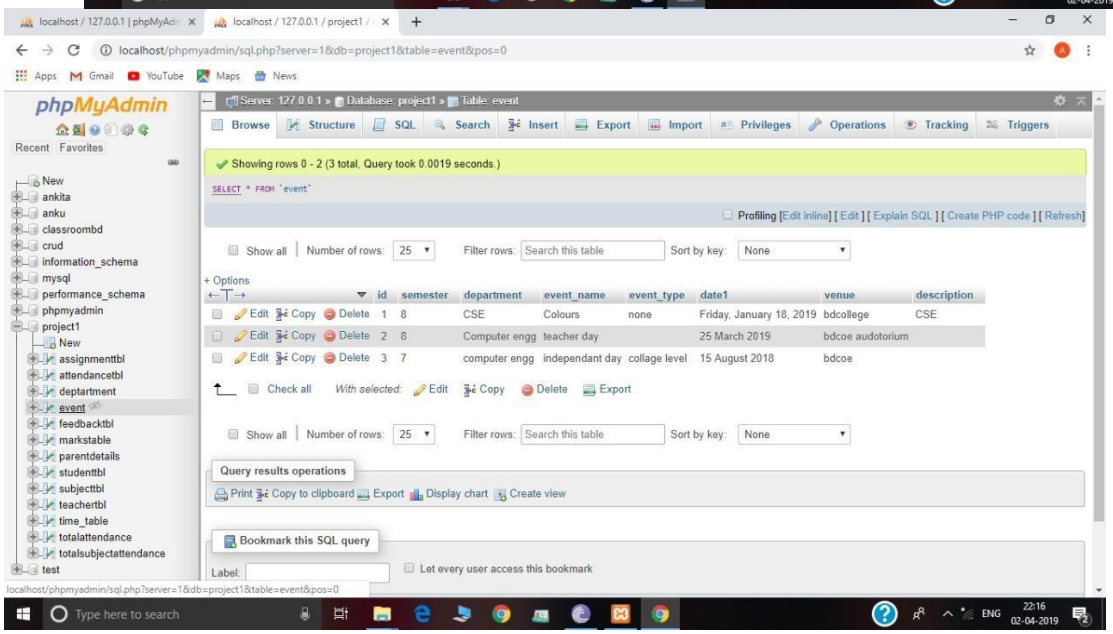
phpMyAdmin
Browse
Structure
SQL
Search
Insert
Export
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Privileges
Operations
Tracking
Triggers
Showing rows 0 - 2 (3 total, Query took 0.0019 seconds.)
Query results operations
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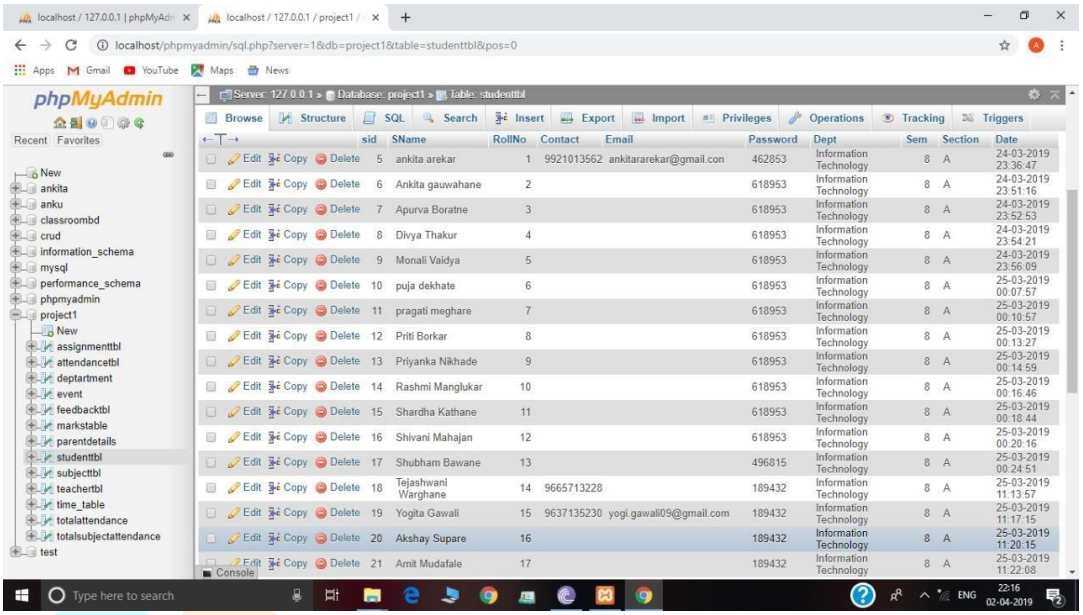
phpMyAdmin
Server: 127.0.0.1 » Database: project1 » Table: studenttbl
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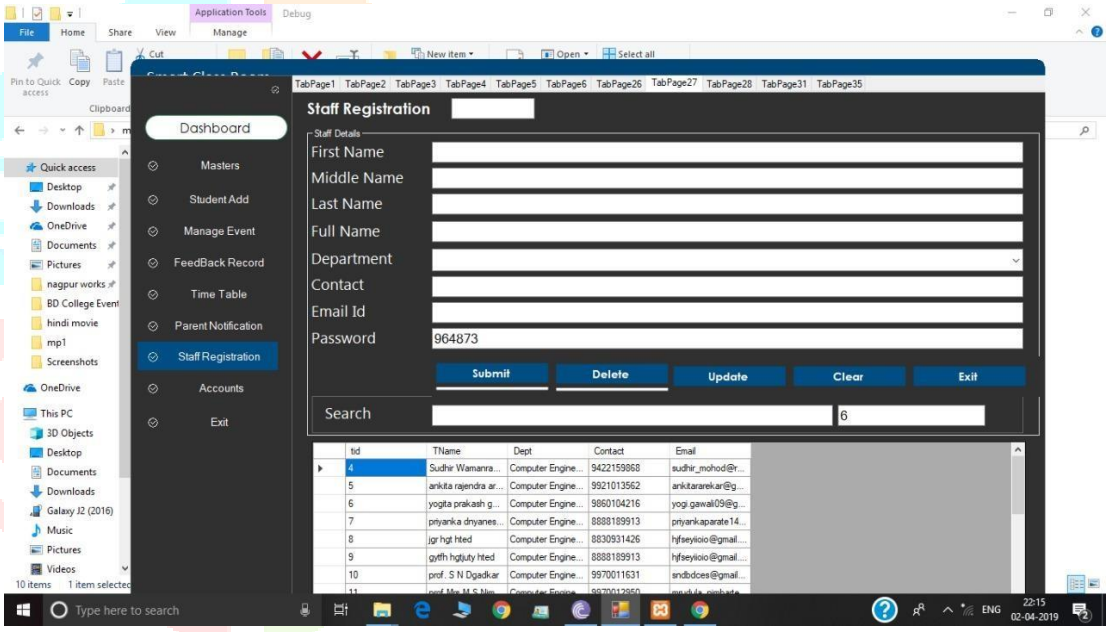
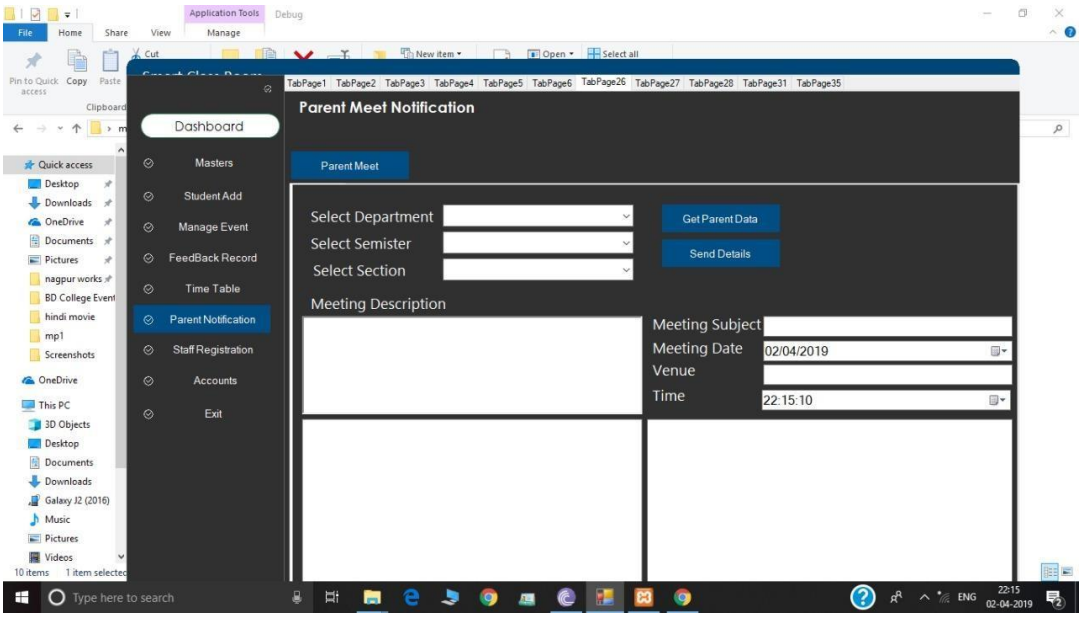

Staff Registration
Dashboard
Masters
Student Add
Manage Event
FeedBack Record
Time Table
Parent Notification
Staff Registration
Accounts
Exit
First Name
Middle Name
Last Name
Full Name
Department
Contact
Email Id
Password
964873
Submit
Delete
Update
Clear
Exit
Search


Parent Meet Notification
Dashboard
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Student Add
Manage Event
FeedBack Record
Time Table
Parent Notification
Staff Registration
Accounts
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Parent Meet
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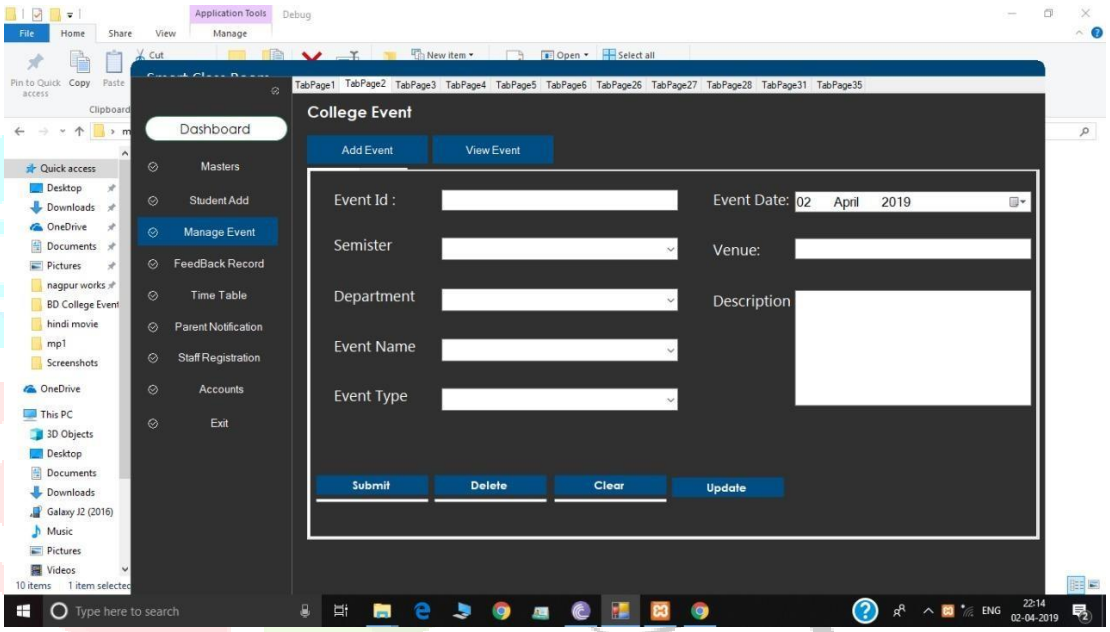
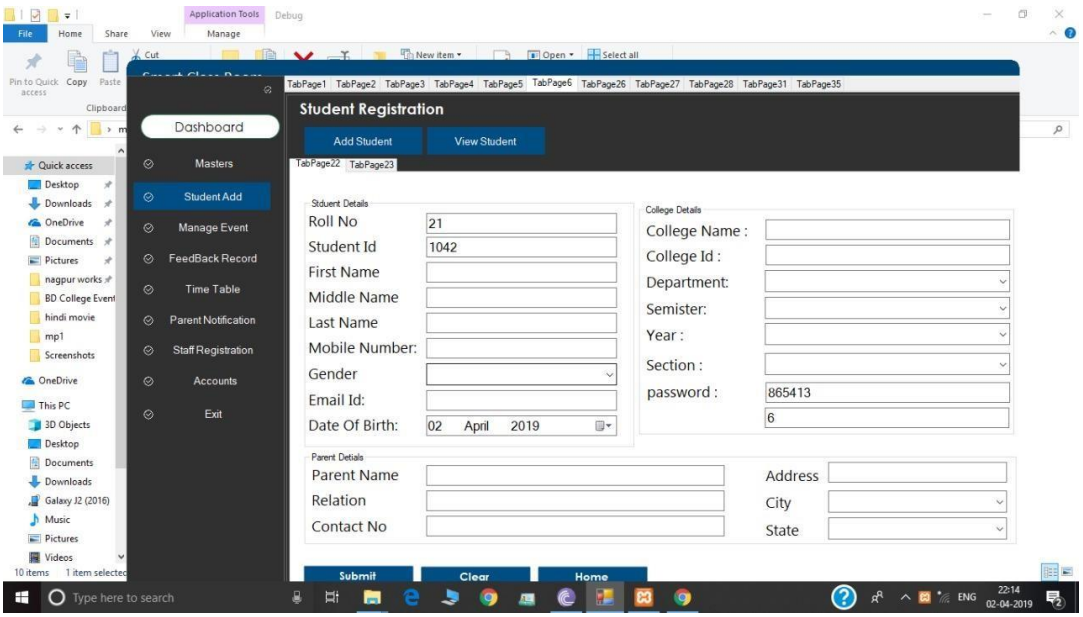
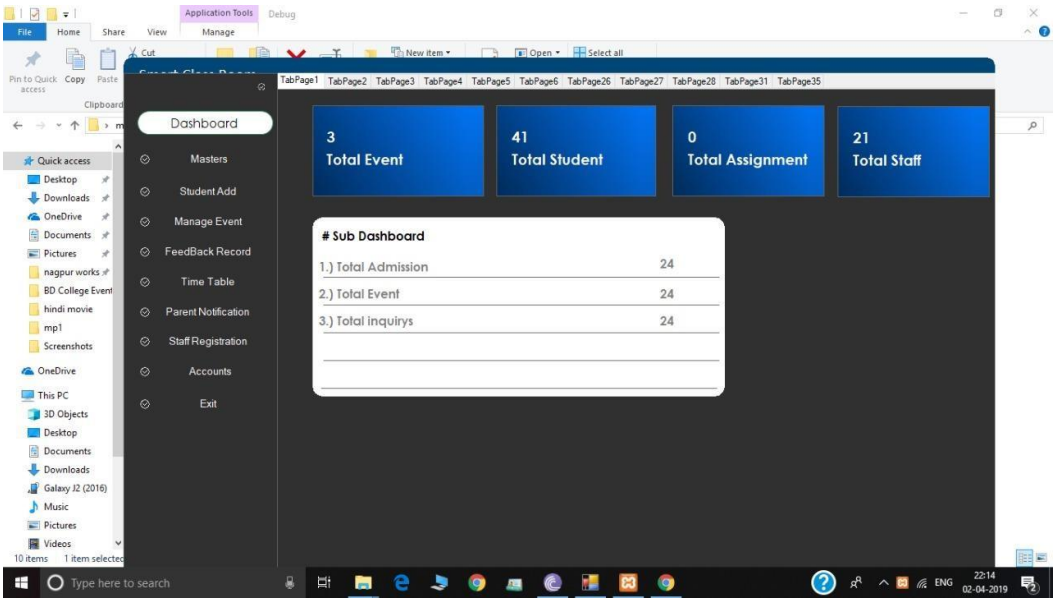
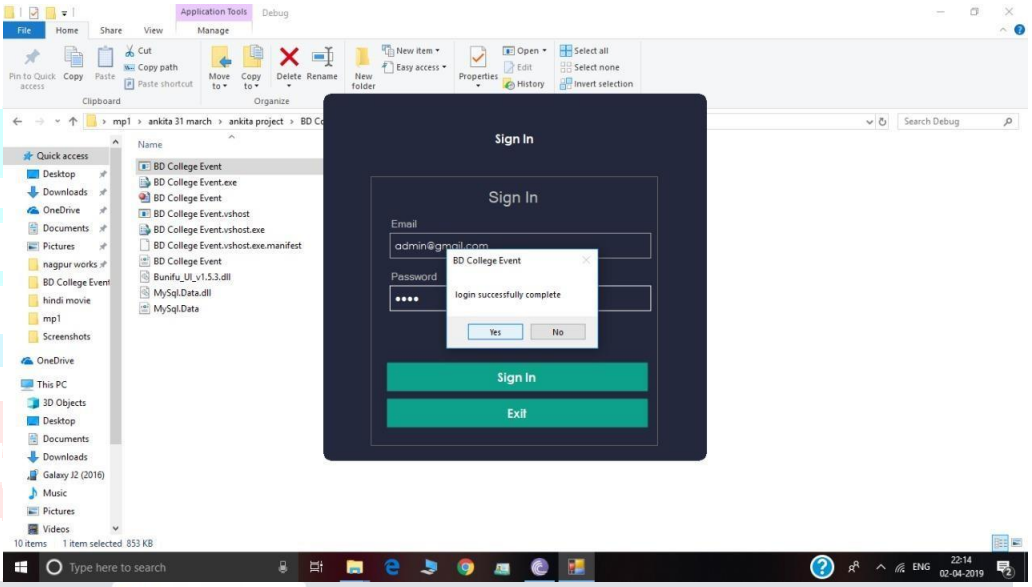
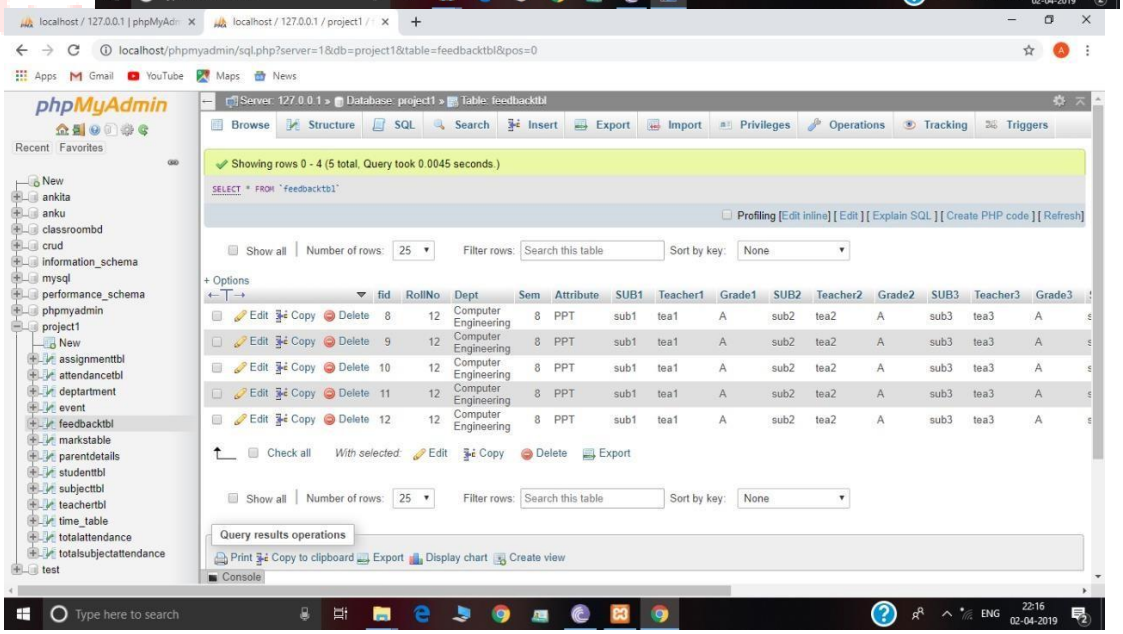
Send Details
Meeting Description
Meeting Subject
Meeting Date
02/04/2019
Venue
Time
22:15:10


College Event
Dashboard
Masters
Student Add
Manage Event
FeedBack Record
Time Table
Parent Notification
Staff Registration
Accounts
Exit
Add Event
View Event
Event Id :
Event Date:
02 April 2019
Semister
Venue:
Department
Description
Event Name
Event Type
Submit
Delete
Clear
Update


Student Registration
Dashboard
Masters
Student Add
Manage Event
FeedBack Record
Time Table
Parent Notification
Staff Registration
Accounts
Exit
Add Student
View Student
Student Details
Roll No
21
Student Id
1042
First Name
Middle Name
Last Name
Mobile Number:
Gender
Email Id:
Date Of Birth:
02 April 2019
College Details
College Name :
College Id :
Department:
Semister:
Year :
Section :
password :
865413
6
Parent Details
Parent Name
Relation
Contact No
Address
City
State
Submit
Clear
Home


Dashboard
Masters
Student Add
Manage Event
FeedBack Record
Time Table
Parent Notification
Staff Registration
Accounts
Exit
3
Total Event
41
Total Student
0
Total Assignment
21
Total Staff
Sub Dashboard
1.) Total Admission 24
2.) Total Event 24
3.) Total inquirys 24


Sign In
Email
admin@gmail.com
Password
BD College Event
login successfully complete
Yes
No
Sign In
Exit


phpMyAdmin
Showing rows 0 - 4 (5 total, Query took 0.0045 seconds.)
SELECT * FROM `feedbacktbl`

5.3 Discussion

Every child deserves a safe and efficient learning environment. For hundreds of years, educators have put their best foot forward and were able to deliver just that. There was order and peace in the classroom. Students were obedient. They attended school every day, learned their lessons well, and were respectful of their teacher. Teachers were able to handle any discipline problem that came along. They had full cooperation and support from each student's parents. Life in the classroom was simple. Teachers could teach, students could learn. So what has happened to change our educational system? The world has changed, and with it has brought many evolutions and conflicts for both the student and the teacher.

Chapter 6

CONCLUSION AND FUTURE SCOPE

This chapter presents the conclusion of this dissertation and the future work that can be carried out on the basis of the present work. The conclusion summarizes the overall work that has been carried out in this dissertation. The future scope provides the direction for extension of the presented work.

6.1 Conclusion

This section summarizes the conclusion based on the obtained results mentioned in chapter 5.

- In this dissertation, we have developed an approach for determining similarity between images through graph-theoretic description and matching. A region- based graph-theoretic representation of images is proposed and a heuristic matching algorithm isemployed.

- The proposed approach facilitates the matching of images structurally similar to a given image. The proposed approach exploits the semantic information contained in an image rather than just matching the topology of thegraphs.

- Such an approach can be used for several applications where relevant and perfect matching of images isrequired.

- The execution time depends on the size of thedatabase.

- The results may sometimes be a little less accurate subject to the distortion, transformation or scale changes in theimage.

6.2 FutureScope

This section presents the possible future directions to extend the presented work.

- In future the experimentations can be carried out by using the more number of attributes which can be considered for nodes and edges. For example, node attributes such as Euler number, solidity, convex area, orientation and edge attributes such as number of pixels on the common boundary can beconsidered.

- A sparse connectivity can be employed between the nodes using graph representations such as nearest neighborgraphs.

- Colour image segmentation can be employed to obtain the connectedregions.

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[W2] *http://en.wikipedia.org/wiki/File:Tour_Eiffel_Wikimedia_Commons.jpg*

[W3] *http://en.wikipedia.org/wiki/Wikipedia:Featured_picture_candidates/Eiffel_To wer*

[W4] *http://learningparis.weebly.com/what-does-the-eiffel-tower-stand-for.html*

[W5] *http://lettersfromladygodiva.blogspot.in/2012/07/tiger-pictures-big-cats.html?m=0*

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