



G.M.D. ARTS, B.W. COMMERCE & SCIENCE  
COLLEGE, SINNAR.

Department Of Computer Science

A PROJECT REPORT ON  
**“Teacher Record Management System”**

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Savitribai Phule Pune University  
2022-2023




M.V.P. Samaj's.

G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

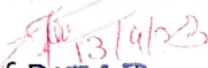
# CERTIFICATE

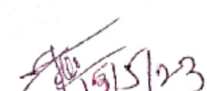
This is to certify that,  
Gujar Gauri Nandkishor  
Varandal Tina Shivaji  
Kapgate Diksha Yograj

Student of B.Sc. Computer Science has satisfactory completed Project work on "Teacher Record Management System", towards partial fulfilment of degree course affiliated to Savitribai Phule Pune University for the Academic Year 2022-2023 at G.M.D. ARTS, B.W. COMMERCE & SCIENCE COLLEGE, SINNAR.

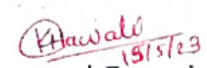
  
Project Guide

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## ABSTRACT

Teachers form a main part of any institution that concerns with. The Teacher Record Management System contains data and information about the teacher. The main purpose of TRMS is to systematically record, store and update the teacher's records.

Progressions can be brought about in the overall system of education, when the concept of teacher management is identified in an appropriate manner.

Teachers are the ones who impart knowledge and information to the students in such a manner and ensure that their growth and development takes place in an operative manner and they are able to achieve their academic goals and objectives. The information from TRMS is used to search teachers online. With the help of this software, a person can easily search for a teacher according to his/her requirement.

Some of the features that it can include are as follows:

- Teacher database management: The details of the teachers of the organizations can be stored in the database with the use of this application.
- Security: The data that will be disclosed will be more secure since there will be no access to the unknown users.
- Performance: The performance of the teachers might be in curriculum as well as co-curriculum can also be stored through the use of this application.
- One-click access: You will obtain the details of the teachers by entering his/her name or the roll number just in one click.
- User interface: The user interface must be simple and easy to understand.
- Personal details: All the personal details of the teachers can be obtained in just one mouse click.

## INTRODUCTION

A Teacher Management System is a solution tool meant to collect, store, and manage all data created by a School/college, including a teacher's information grades, activity records, and so on.

A Teacher Management System (TRMS). These systems work to coordinate scheduling and communications between faculty regarding Teacher. This system exists to simplify information tracking for administrative staff.

Teacher management is becoming a basic necessity in education in the modern-day age and it is to automate all functions performed on a daily basis in the college.

With the help of this system we can gather all the useful information needed to the management in a few clicks. Main purpose is to create software which will manage the working of these different modules. The interconnectivity among modules reduces the time required to perform different operational task. The software help gather the basic information of student automatically. It helps staff, faculty and management departments of college. The system is capable of storing the details of Teacher, faculty and maintains their details in a dynamic way. The proposed system provides the easiest way to manage all aspects of teacher and college. It can handle the activities of teachers. Using this system, users can manage teacher's details. Using this system, users can retrieve any information related to teacher. The objective of the system is to reduce the paperwork and to eliminate manual processes and to save significant staff time.

- ***Motivation -***

The education system has constantly been evolving, hence to keep up with new channels of education we need to evolve our system to store information by automating the traditional ways and bringing more structure to the curriculum because today the world is on the verge of continuous evolution and so are we. The education systems all over the world are getting better along with getting complex. These systems are growing in size as well as scope, therefore it needs to be defined management for smooth functioning to keep up with new modes of information and new channels of education.

- *Motivation -*

The ultimate aim of any school is towards generating the best inputs, output from the teachers. In fact, the teachers on their end develop a sense of learning and exploring through these teacher record management systems. Not just this but the teachers themselves are now much more devoted and interested along with their academics linings using a teacher management system. These automated systems give us all time universal access to the portals and therefore it is very beneficial for teacher and their work. It is beneficial not only for the teachers but also for parents and student to keep strong control over the system.

- *Motivation -*

Day to day processes with these systems can be managed in a much efficient way. These systems give a unified view that helps the user to perform activities. It also helps remind which activities an individual needs to perform and which of them are already done.

It's quite easy to review the performances of teachers with the help of automated reports and analytics. These systems help teachers keep a record of their own performance but also work on the areas or subjects they are at.



• **STATEMENT OF THE PROBLEM -**

The present system involves manual entry of the teacher information in pen and paper which causes lot of difficulties to the faculties. And there is a possibility that these records may go missing or get destroyed when any accident happens.

Moreover it's difficult for teachers to coordinate with the faculties in these pandemic period. And there occurs a problem when you need to search for a record because the records are large in numbers and the chances of errors are maximum in manual mode. Another problem is the security and it is limited to physical controls.

• **AIMS AND OBJECTIVES -**

The main objective of the system is to reduce the paper work and to eliminate manual processes and to save significant staff time. Using this system, teachers can view teacher details. Admin can view the student's details by entering user name. Retrieval of any information related to the teacher. The student and admin, give their feedback to teacher through the notification module

- The system will ensure the practicality, reliability, advancement, and applicability of the system and strive to operate concisely and simplify the operation process.
- The system will achieve classification and grading management of each submodule, dynamic management of the database, and classification of data to prevent data confusion.
- The system is capable of simple query and compound query according to different conditions selected by the user, and the system development focuses on user experience.
- The system is capable of classifying and summarizing the results of the user query, realizing the export function, and finally realizing the printing of reports
- The system focuses on data security and is capable of backing up the data and recovering the data deleted by mistake.
- The import and export function of the data.

- ***SCOPE AND LIMITATIONS -***

The scope of this system is designed to be fully user-friendly and efficient. Its tasks could range from everything else needed to keep the school's administrative division running properly TRMS is used for making the process of managing information easier and to also make it accessible. It keeps track of teacher information like: subjects, educational information.

**LIMITATIONS –**

- The teacher record management system is prone to hacks.
- Administration cannot edit or modify after the deadline.
- Extensive modules and features make it difficult for a user to utilize the application.
- Minor technical glitches and issues.

- ***LITERATURE SURVEY -***

These include a critical analysis of the relationship among different works, and explain the facts, designs, principles and prior arts to which the Teacher's Information Management System is related.

# System Analysis

- **EXISTING SYSTEM :**

System Analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system.

In the current system we need to keep a number of records related to the teacher and want to enter the details of the teacher and the data manually. In this system only the teacher or the school authority views the data of the teacher and they want to enter the details of the teachers . This is time consuming and has much costs.

- **Scope and Limitation of Existing System :**

Scope : The existing System for Teacher Record Management allows you staff To search teacher, manage profiles ,manage subjects.

Limitations : The System lacks advanced feature such as AI , meachine Learning And personalized recommendations. And the user interface needs improvement To enhance the college staff experience

- **PROPOSED SYSTEM :**

In our proposed system we have the provision for adding the details of the teacher by themselves. So the overhead of the school authorities has become less. Another advantage of the system is that it is very easy to edit the details of the teacher and delete a teacher when it found to be unnecessary. The information of the teachers are added in the database and so teachers can also view the information whenever they want.

Our proposed system has several advantages -

- User friendly interface
- Fast access to database
- Less error
- More Storage Capacity
- Search facility
- Look and Feel Environment
- Quick transaction

All the manual difficulties in managing the teachers details in a school or college have been rectified by implementing computerization.

## **FEASIBILITY ANALYSIS :**

Whatever we think need not be feasible .It is wise to think about the feasibility of any problem we undertake. Feasibility is the study of impact, which happens in the organization by the development of a system. The impact can be either positive or negative. When the positives nominate the negatives, then the system is considered feasible. Here the feasibility study canbe performed in two ways such as technical feasibility and Economical Feasibility.

### **Technical Feasibility:**

We can strongly says that it is technically feasible, since there will not be much difficulty in getting required resources for the development and maintaining the system as well. All the resources needed for the development of the software as well as the maintenance of the same is available in the organization here we are utilizing the resources which are available already.

### **Economical Feasibility**

Development of this application is highly economically feasible .The organization needed notspend much money for the development of the system already available. The only thing is to be done is making an environment for the development with an effective supervision. I f we are doing so , we can attain the maximum usability of the corresponding resources .Even after the development , the organization will not be in condition to invest more in the organization Therefore , the system is economically feasible.

## Project Perspective

For the purpose of clarity, the terms used in this study are defined conceptually and operationally. **Teacher.** It is a person who helps others to acquire knowledge, competence or values.

In this study, **teacher** refers to the subject and respondent of this study which the system will be made. **Information.** Facts provided or learned about something or someone. In this study, **information** refers to the data/s of the teachers which they will be input in the Teacher's Information Management System. **Management.** Management includes the activities of setting the strategy of an organization and coordinating the efforts.

## Stakeholder

This study is very significant and can benefit the following stakeholders:

- **Teacher's.** This study will be beneficial to the teachers as the Teacher's Information Management System will help to manage and secure their data/s to avoid data/s redundancy and theft. Also, the result of this study will help to lessen the times and efforts of every teacher in doing their personal data sheet to convert into computer-generated through this system.
- **Schools.** This study will be useful to the school as they will have an idea and information in managing and securing the information of the teachers. Also, the result of this study will be able to utilize and apply the specific way on how to manage the teacher's information.
- **Programmers and Software providers.** This study will enable programmers and software providers to utilize technology that can be customized to the needs of the local industry and can be made available to the teachers.
- **Future Researchers.** This study will provide future researchers the information that is significant in the conduct of similar studies.

- **FUNCTIONAL REQUIREMENTS**

Functional requirements define the fundamental actions that must take place in the software in accepting the inputs and in processing and generating the outputs. These are listed as “shall” statements starting with “The system shall....”

- **Login Module** – This module is provided for administrator and users such as Product buyer and seller who have registered themselves in the system. These login are provided according to the need of the systems.

**Input** – User id and password

**Process** – After entering user id and password by user process of validation occur to identify whether user id and password is available in database or not.

**Output** – Registered user can access website and can use the services.

- **Administrator Module** – The administrator is provided with password and login-id with which he/she can access the system. Administrator is provided right of maintaining the database, verifies registered users.

**Input** – Login id and password.

**Process** – Process of validation will occur.

**Output** – Administrator will maintain the database and will perform Product seller process.

- **Search Module** – In this module we are going to provide facility for Product buyer to search for Products according to their specified categories so that users can search for Products easily.

**Input**- Initial letter of Product, with the help of keywords and with the help of Brand name

**Output**- Information about Products.

- **User Module** – As users are the main visitor of site, the following facilities are available through this module.

- Can search the Products according to their need
- Can order online books and pay via credit or atm card or PayPal.
- Can get information about Products.

**Input** – User Id and password

**Process** – Process of validation will occur.

**Output** – Only genuine user can access services provided by website.

- **NON FUNCTIONAL REQUIREMENT-**

**Performance Requirement-**

The performance of the product mainly depends on the speed of Internet connection. If the user wants hard real time response, then this is definitely not the product to go for.

**Safety Requirements-**

The electrical connection to the devices is critical and should be done according to the standards to avoid any short circuits.

**Security Requirements-**

We aim to provide high security features like encryption to the user accounts to provide security from illegal hacking and gaining access to the system.



-This management system can be used in Windows NT, supported for other platform such as Applet, Macintosh and UNIX.

-The system must be running Windows 98, Windows 98 or Windows NT4.0 operating system and must meet the following hardware requirements.

-For Windows NT based computers , a 488/66 MHz or higher processor with 16 MB of RAM

# SYSTEM DESIGN

## INPUT DESIGN

Input design is the process of converting user-oriented input to a computer based format. Input design is a part of overall system design, which requires very careful attention. Often the collection of input data is the most expensive part of the system. The main objectives of the input design are ...

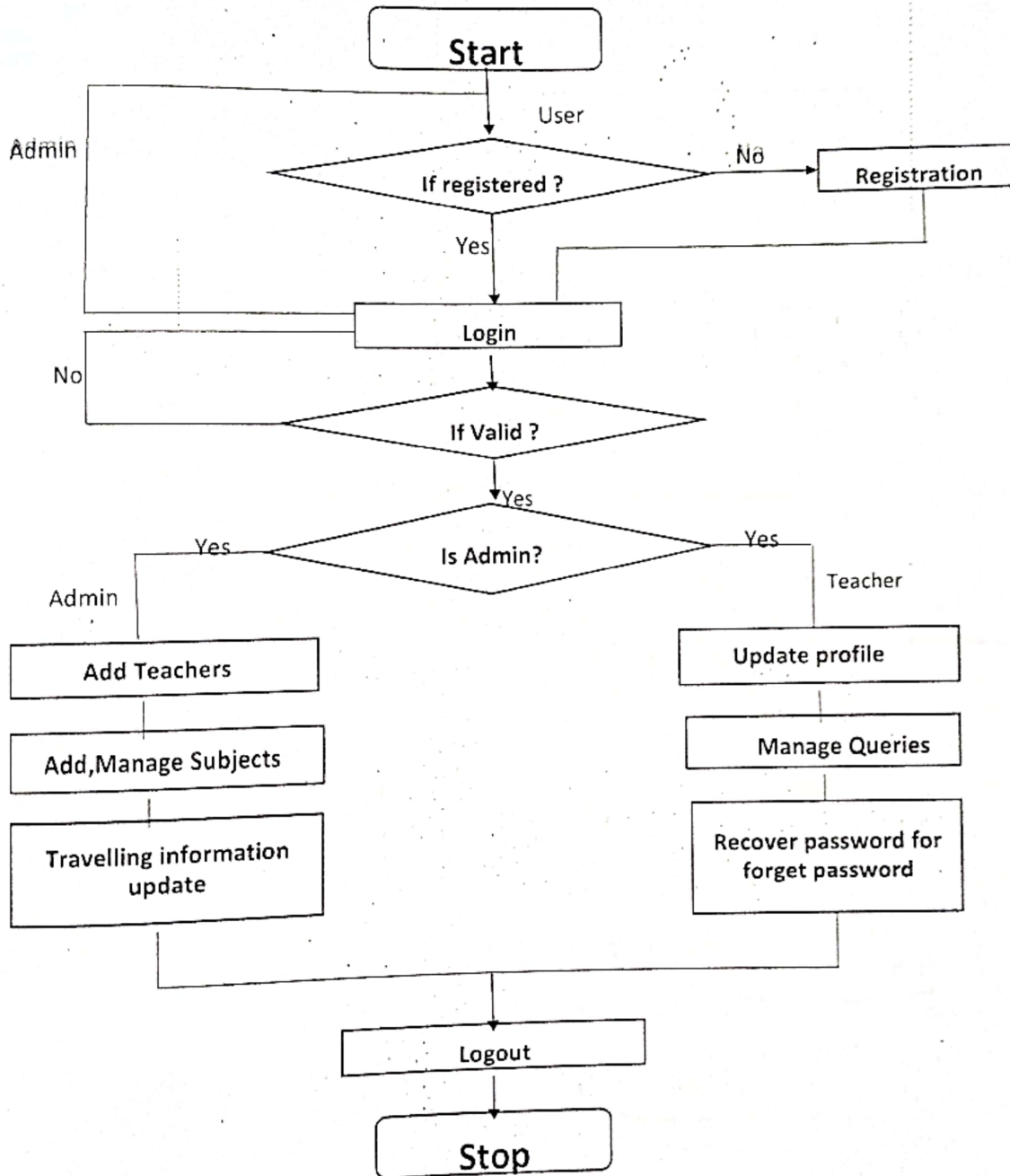
1. Produce cost effective method of input
2. Achieve highest possible level of accuracy
3. Ensure that the input is acceptable to and understood by the staff.

## OUTPUT DESIGN

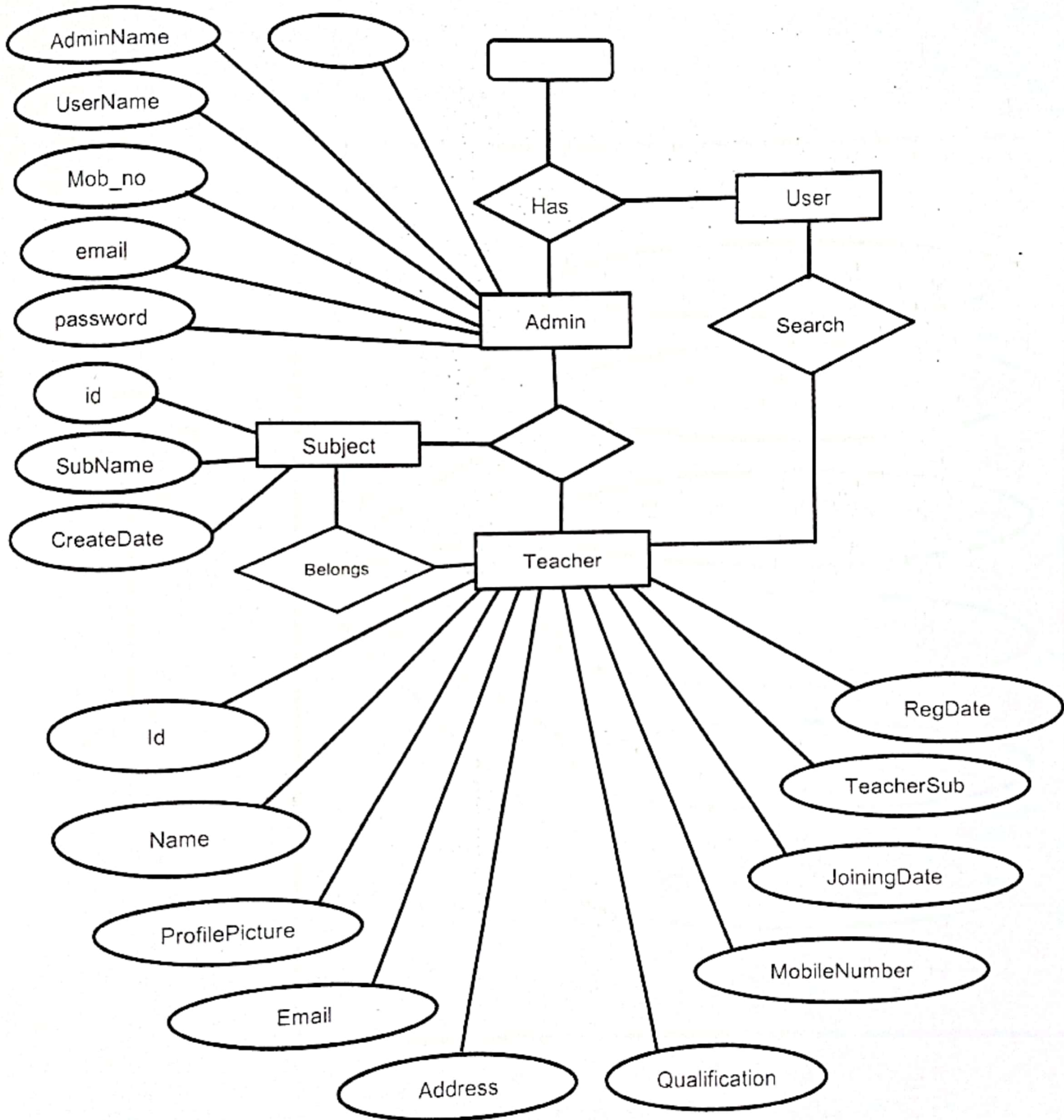
Outputs from computer systems are required primarily to communicate the results of processing to users. They are also used to provide a permanent copy of these result for latter consultation. Computer output is the most important and direct source of information to the users. Designing computer output should proceed in an organized well through out the manner. The right output must be available for the people who find the system easy o use. The outputs have been defined during the logical design stage. If not, they should defined at the beginning of the output designing terms of types of output connect, format, response etc.

# System Model –

## System Flow Chart

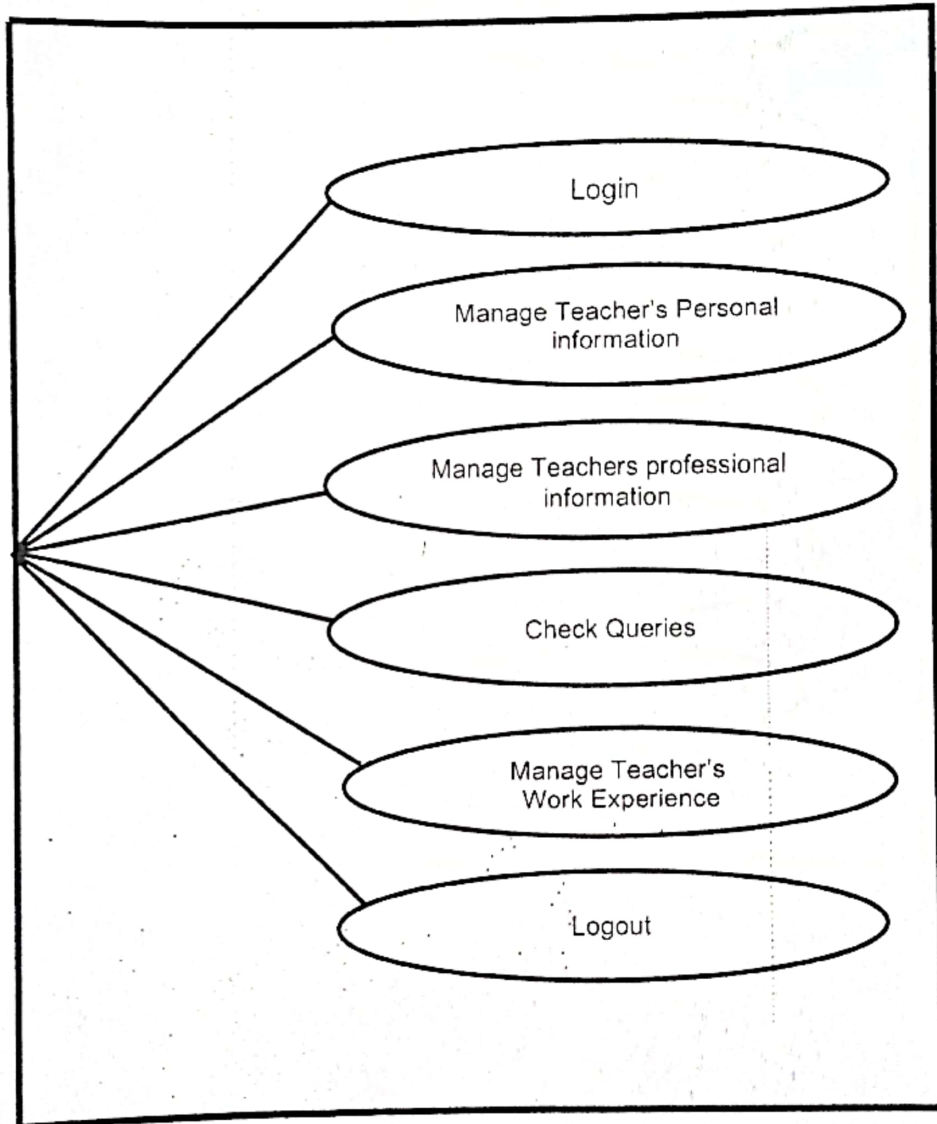
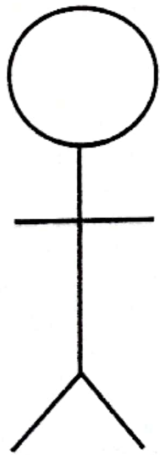


# ER-Diagram-

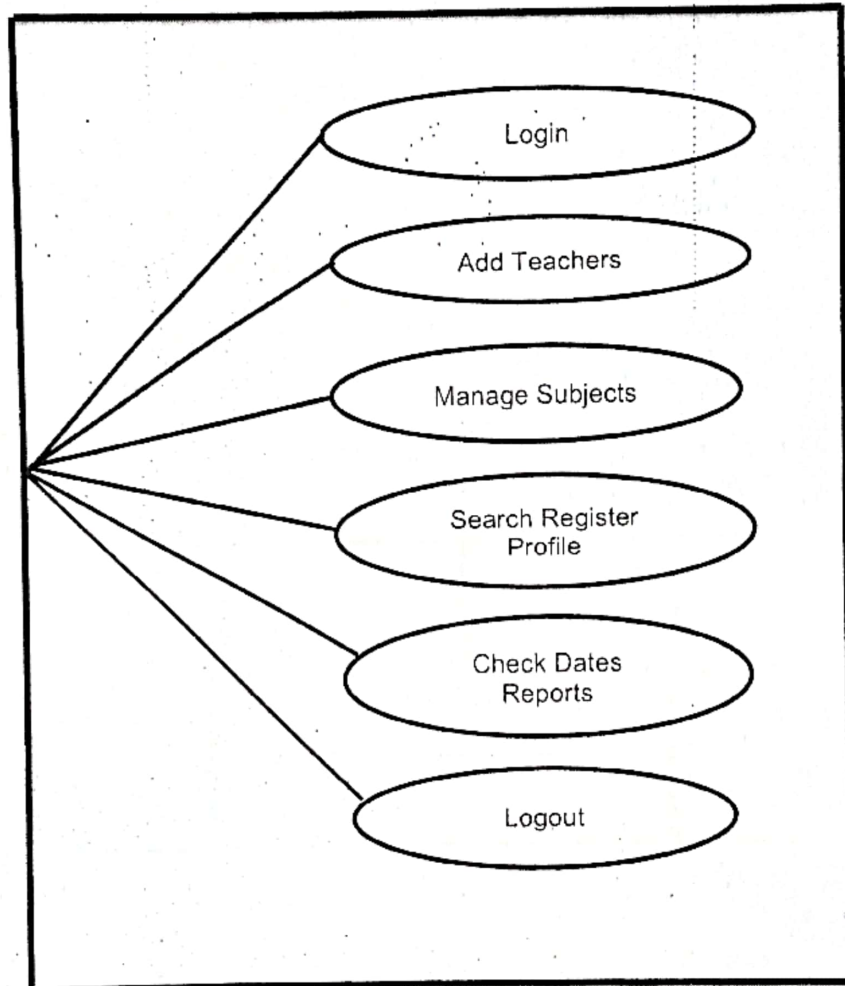
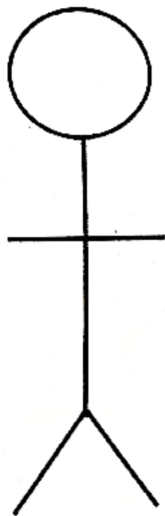


Use Case Diagram –

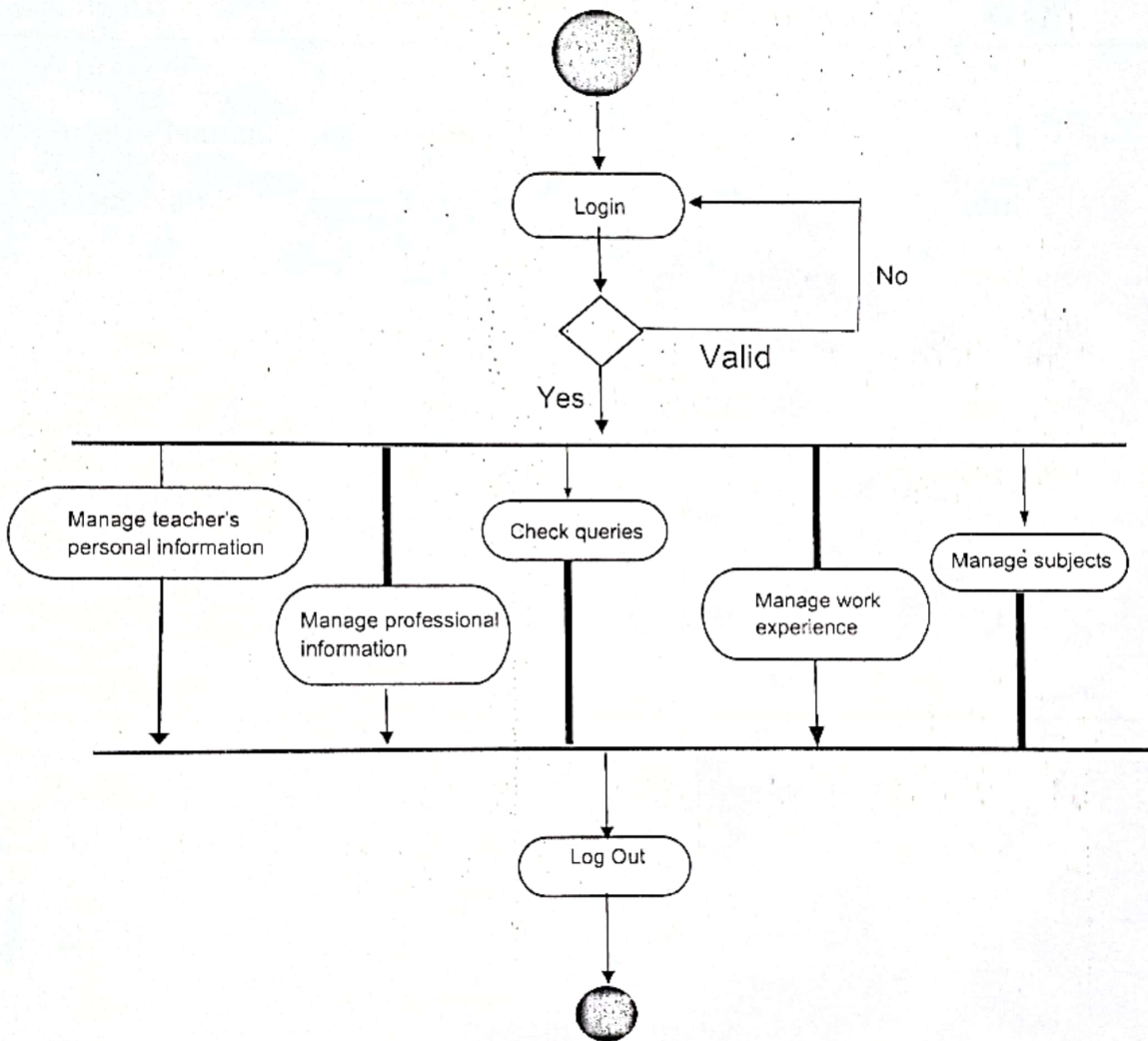
Use Case Diagram For Teacher :



# Use Case Diagram For Admin :



# Activity Diagram –



## Data Model –

Table 1 : Admin

Name	Data Type	Size	Key
ID	int	10	null
Admin Name	varchar	120	null
User Name	varchar	120	null
Mobile_No	bigint	10	null
Email	varchar	120	null
Password	varchar	200	null
AdminRegDate	timestamp	-	Current_timestamp()

Table 2 : Query

Name	Data Type	Size	Key
ID	int	11	null
Teacher_Id	int	11	null
fName	varchar	200	null
Email_id	varchar	200	null
Mob_no	bigint	10	null
Query	mediumtext	-	null
Query_Date	timestamp	-	current_timestamp()
Teacher_note	mediumtext	-	null



Table 3 : Subject –

<b>Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Key</b>
ID	int	10	Null
Subject	varchar	20	Null
Creation_date	timestamp	-	Current_timestamp()

Table 4 : Teacher –

<b>Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Key</b>
ID	int	11	Null
Teacher_id	int	11	Null
fName	varchar	200	Null
Email	varchar	200	Null
Mobile_no	bigint	10	Null
Query	mediumtext	-	Null
Query_Date	timestamp	-	current_timestamp()
Teacher_note	mediumtext	-	Null

Table 5 : Teacher Information –

<b>Name</b>	<b>Data Type</b>	<b>Size</b>	<b>Key</b>
ID	int	10	null
Name	varchar	120	null
Picture	varchar	200	null
Email	varchar	120	null
Mobile_no	bigint	10	null
Password	varchar	255	null
Qualification	varchar	120	null
Address	varchar	200	null
Teacher_sub	varchar	120	null
Description	mediumtext	-	null
Teaching_Exp	varchar	10	null
Joining_Date	varchar	120	null
Register_Date	timestamp	-	Current_timestamp()
isPublic	int	1	null

User Interface –  
➤ Home :

TRMS

Home About Listed Teachers Contact admin

# Teachers Record Management System

Teachers Signup/Registration

Teachers Login

Search Teacher by Name or Subject

Search Teacher by Name or Subject

Search

## Listed Teachers



Operating Systems (OS)

Kanchan Gavali

Registered Since 2022-03-05 18:11:37



JAVA

N.V.Lahamage

Registered Since 2022-03-12 13:12:21



Chemistry

Amit kumar

Registered Since 2022-03-14 22:31:04



PHP

Shraddha Jadhav

Registered Since 2023-03-12 13:49:14

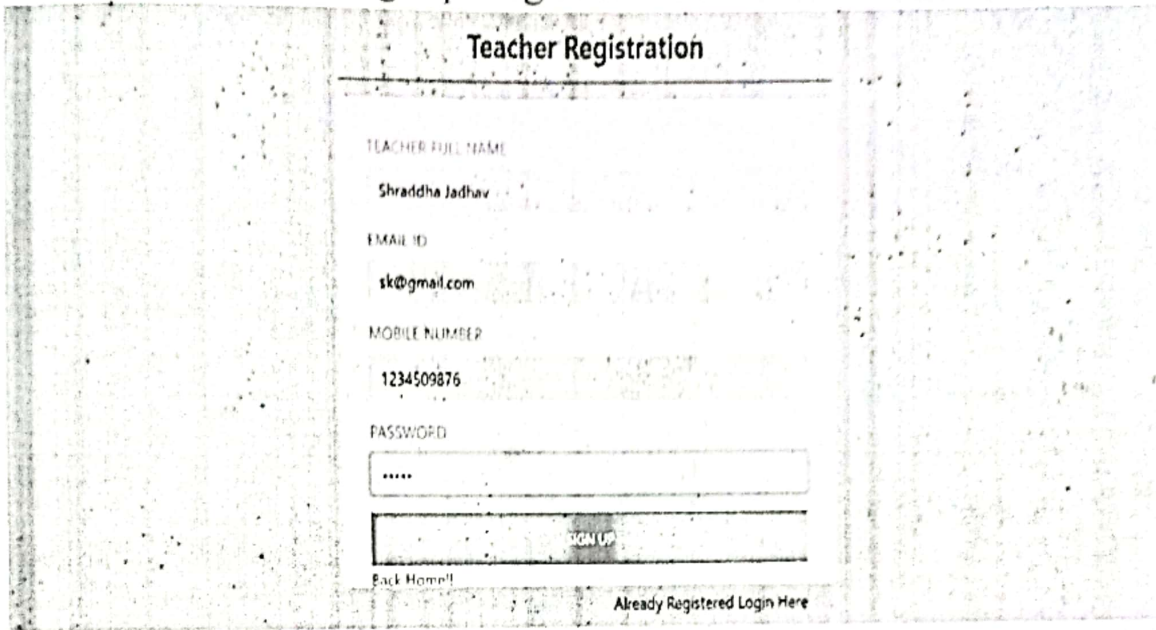


Python

Jayshree Bhangare

Registered Since 2023-03-12 14:15:20

➤ Teacher Signup/Registration :



The screenshot shows a web form titled "Teacher Registration". It contains several input fields: "TEACHER FULL NAME" with the value "Shradha Jadhav", "EMAIL ID" with "sk@gmail.com", and "MOBILE NUMBER" with "1234509876". There is a "PASSWORD" field with four asterisks. Below the password field is a "SIGNUP" button. At the bottom left is a "Back Home!!" link, and at the bottom right is an "Already Registered Login Here" link.

Teacher Registration

TEACHER FULL NAME  
Shradha Jadhav

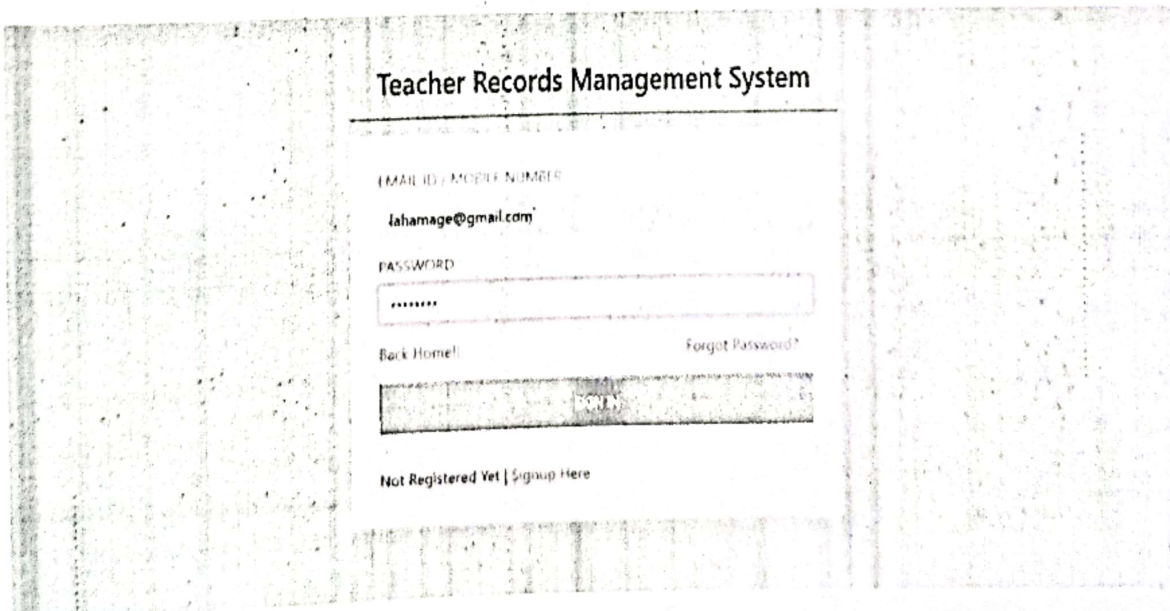
EMAIL ID  
sk@gmail.com

MOBILE NUMBER  
1234509876

PASSWORD  
\*\*\*\*

[Back Home!!](#) [Already Registered Login Here](#)

➤ Teacher Login :



The screenshot shows a web form titled "Teacher Records Management System". It contains two input fields: "EMAIL ID / MOBILE NUMBER" with the value "lahamage@gmail.com" and "PASSWORD" with six asterisks. Below the password field are two links: "Back Home!!" and "Forgot Password?". Below these links is a "LOGIN" button. At the bottom left is a "Not Registered Yet | Signup Here" link.

Teacher Records Management System

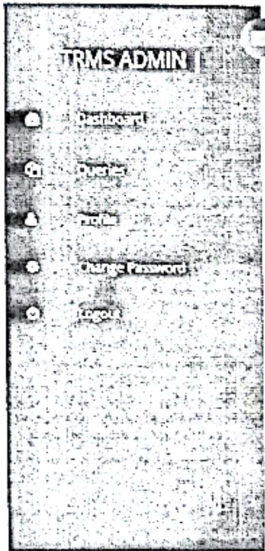
EMAIL ID / MOBILE NUMBER  
lahamage@gmail.com

PASSWORD  
\*\*\*\*\*

[Back Home!!](#) [Forgot Password?](#)

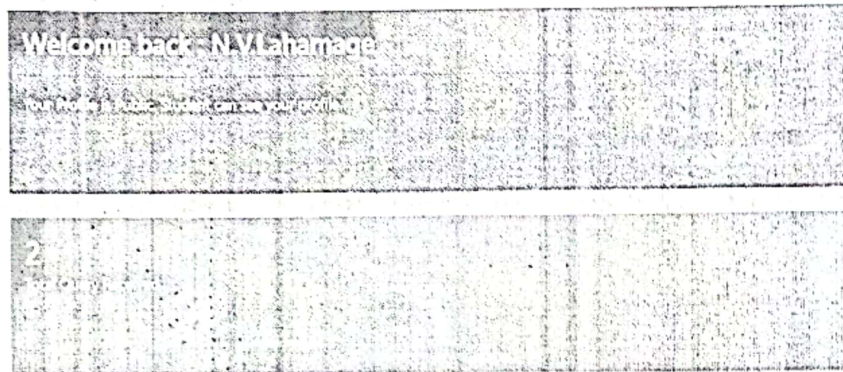
[Not Registered Yet | Signup Here](#)

➤ Teacher's Dashboard :



Dashboard

Dashboard



➤ Update Profile Details :

Update Teacher Detail

Dashboard / Update Teacher / Update

**Teacher** Personal Details

Teacher Name

N.V.Lahamage

Teacher Pic



Edit Image

Teacher Email ID

lahamage@gmail.com

Teacher Mobile Number

1425369874

Teacher Address

.....

**Teacher** Professional Details

Teacher Qualifications(Sepereted by comma)

BCS,MCS

Teaching Experience (in Years)

08

Teacher Subjects

JAVA

Description (if Any)

NA

## ➤ Manage Queries :

Manage Queries Dashboard / Manage Queries / Manage Queries

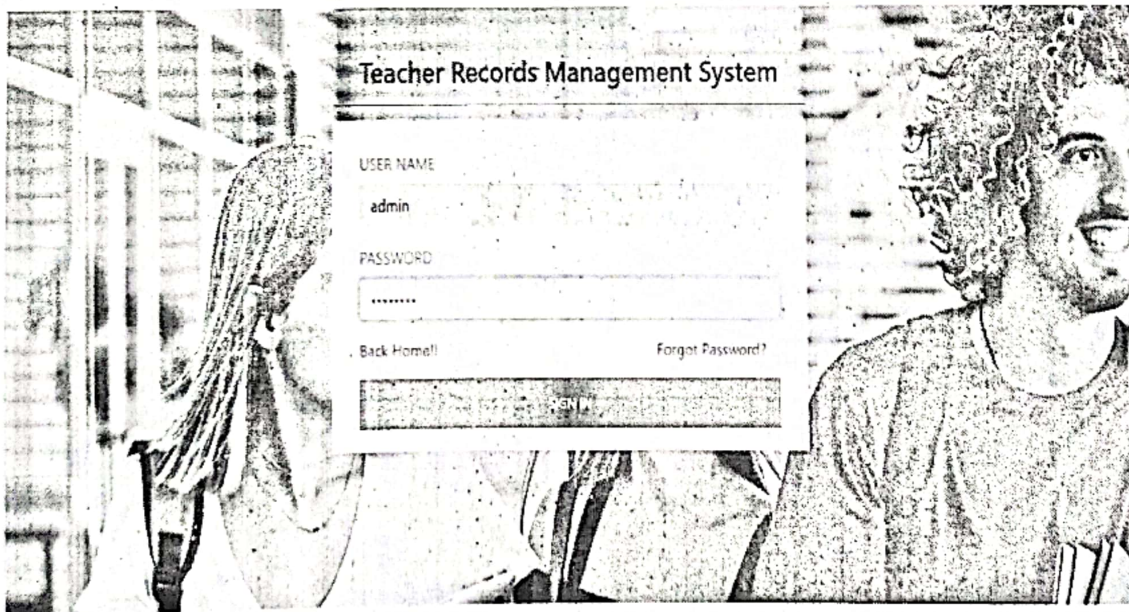
Manage Queries

Show  entries Search:

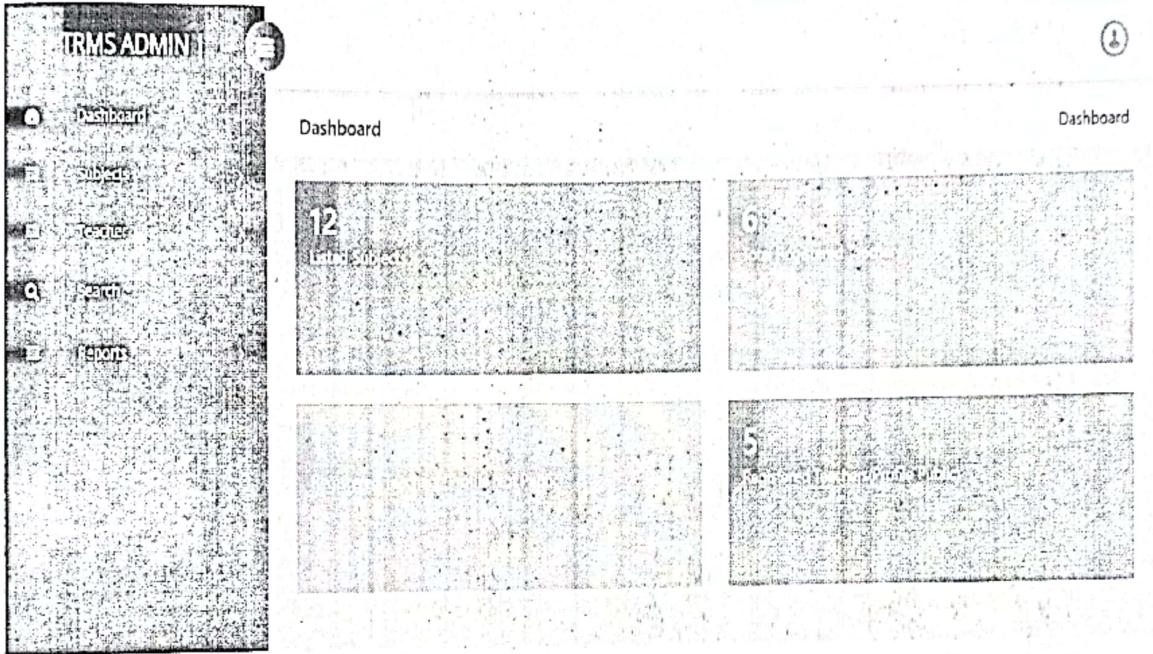
S.NO	Name	Email	Mobile No	Date	Action
1	Tina Varandal	tina@gmail.com	123456789	2023-03-12 14:26:04	<a href="#">View</a>
2	Diksha Kapagte	dk@gmail.com	2233445566	2023-03-12 14:28:08	<a href="#">View</a>

Showing 1 to 2 of 2 entries Previous 1 Next

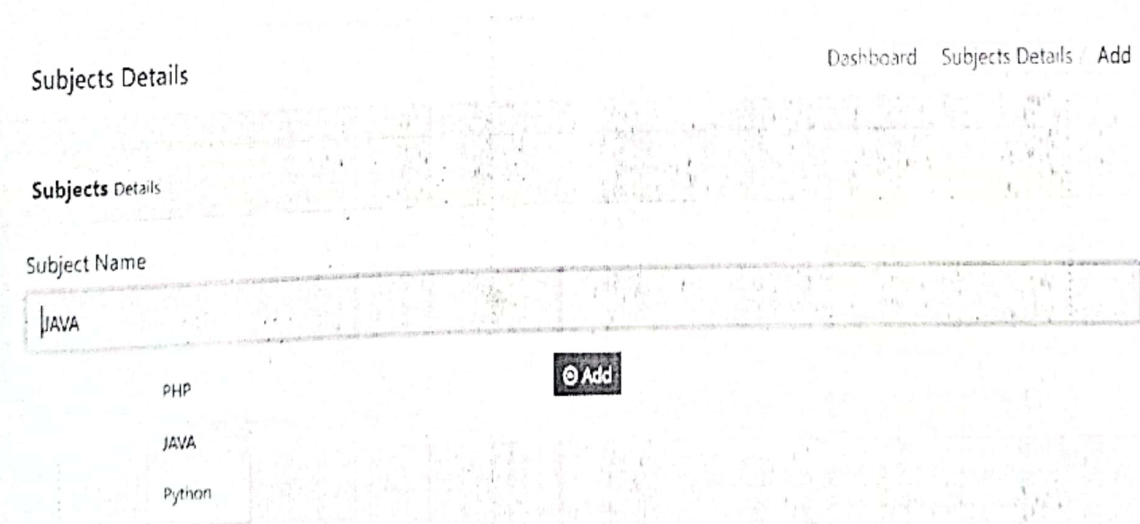
## ➤ Admin Login :



➤ Admin Dashboard :



➤ Subject Detail :





## ➤ Manage Subject :

Manage Subject

Dashboard / Manage Subject / Manage Subject

Manage Subject

S.NO	Subject Name	Creation Date	Action
1	Mathmetics	2019-10-07 11:41:06	<a href="#">Edit</a> <a href="#">Delete</a>
2	Physics	2019-10-07 11:41:19	<a href="#">Edit</a> <a href="#">Delete</a>
3	Chemistry	2019-10-07 11:41:32	<a href="#">Edit</a> <a href="#">Delete</a>
4	Biology	2019-10-07 11:41:41	<a href="#">Edit</a> <a href="#">Delete</a>
5	Hindi	2019-10-07 11:41:49	<a href="#">Edit</a> <a href="#">Delete</a>
6	English	2019-10-07 11:41:56	<a href="#">Edit</a> <a href="#">Delete</a>

## ➤ Manage Teacher :

Manage Teachers

Show 10 entries

Search:

S.NO	Teacher Name	Subject	Registration Date	Action
1	Kanchan Gavali	Operating System (OS)	2022-03-05 18:11:37	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Queries</a>
2	N.V.Lahamage	JAVA	2022-03-12 13:32:21	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Queries</a>
3	Amit kumar	Chemistry	2022-03-14 22:31:04	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Queries</a>
4	Shraddha Jadhav	PHP	2023-03-12 13:49:14	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Queries</a>
5	Jayshree Bhangare	Python	2023-03-12 14:15:20	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Queries</a>
6	suvama kardel	Mathmetics	2023-03-12 14:20:05	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Queries</a>

## ➤ Search Teacher/Subject :

Search Teacher

Dashboard / Search Teacher / Teacher

Search Teacher

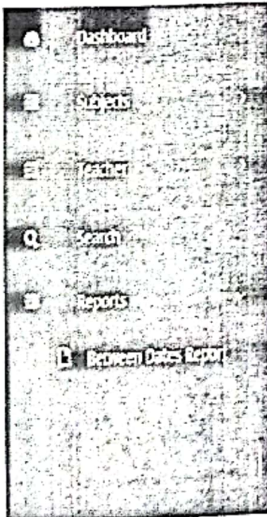
Search by Name or Subject

kanchan

Result at php keyword

S.NO	Teacher Name	Subject	Registration Date	Action
1	Shraddha Jadhav	PHP	2023-03-12 13:49:14	<a href="#">Edit</a> <a href="#">Delete</a> <a href="#">Queries</a>

## ➤ Date Reports :



Between Dates Reports

Dashboard / Between Dates Reports / Reports

Between Dates Reports

From Date

dd-mm-yyyy

To Date

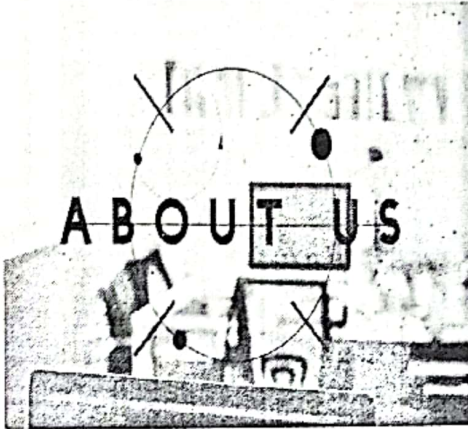
22-03-2023

Submit

➤ About Page :

TRMS

[Home](#) [About](#) [Listed Teachers](#) [Contact](#) [Admin](#)



## About Us

Hello Everyone!.Glad to see you here..GMD College welcomes you. A Teacher Record Management System is also known as a Teacher Record management System (TRMS). These systems work to coordinate scheduling and communications between faculty regarding teachers. This system exists to simplify information tracking for both students and administrative staff.

## Implementations

### HARDWARE CONFIGURATION :

Processor	:	Pentium III
630MHzRAM	:	128 MB
Hard Disk	:	20GB
Monitor	:	15" Color monitor
Key Board	:	122 Keys

### SOFTWARE CONFIGURATION :

Operating System	:	Windows
NT,Language	:	PHP, MySQL
Database	:	MS Access2007.

## OUTPUTS AND REPORTS TESTING

Output testing for the Teacher Record Management System involves Verifying that the system is performing the required function correctly, Such as Adding the Teachers, Managing the teachers and subjects, checking queries.

Reports Testing involves verifying that reports generated by the system are accurate and complete. Both types of testing ensure that the system is Functioning as intended and meeting school and college's needs. Testing Results are documented in a Test report , which summarizes the Testing Process and findings.

- Structural Testing
- Functional Testing

## CONCLUSION AND RECOMMENDATION

### Conclusion

**1.** The system was implemented and evaluated in terms of functional suitability, performance efficiency, compatibility, usability, reliability, security, maintainability and probability.

Teacher's Record Management System presented in this study was able to:

- a. Record the teacher's personal information
- b. Record the teacher's educational background;
- c. Record the teacher's work experience

**2.** The Teacher's Record Management System is very functional, suitable, reliable, performance efficient, usable, secured, compatible, maintained, and portable. This means that the system has strong manifestations that it is compliant with the required features of a decision support system in accordance with known practices and standards.

### Recommendations

From the study's findings and conclusions, the we recommends the following:

1. It is recommended that the Teacher's Records Management System be implemented in order to improve the management procedures and recording of teacher's data as well as to address the problems encountered with the existing system
2. Teacher's Record Management System should be enhanced when it comes to error-free system, user-friendly graphical interface and flexibility.
3. Teacher's Records Management System should be printed directly in order to fasten the time where to consume in indirect printing.

4. Teacher's Record Management System should be widening its scope when inputting the data's.

## **Future Scope and Limitation of the Study**

The study is limited only to the design and development of the Teacher's Records Management System for teachers of School.

This system was limited only to the data of every teacher of School. To achieve the desire system performance, it is assumed that there is sufficient input data. Therefore, the accuracy of the system is primarily dependent on the amount of input data.

The initial implementation of the system is a standalone desktop application.



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