## A Project Report

on

## ASSIGNMENT MANAGEMENT SYSTEM

by

Yash Dewangan (Exam Seat No. T20230) Vaibhav Suryawanshi (Exam Seat No. T20221)

*Under the guidance of* Prof N. S. More



Department of Information Technology Smt. Kashibai Navale College of Engineering, Pune-41 Accredited by NBA

UNIVERSITY OF PUNE 2020-2021

Sinhgad Technical Education Society, Department of Information Technology Smt. Kashibai Navale College of Engineering, Pune-41



Date:

#### **CERTIFICATE**

This is to certify that,

Yash Dewangan (Exam Seat No. T20230)

Vaibhav Suryawanshi (Exam Seat No. T20221)

of class T.E IT; have successfully completed their project work on "Assignment Management System" at Smt. Kashibai Navale College of Engineering, Pune in the partial fulfilment of the Graduate Degree course in T.E at the Department of Information Technology, in the Academic Year 2020-2021 Semester – I as prescribed by the University of Pune.

Prof. N. S. More Prof. R.S. Borhade

Guide Head of the Department (Department of Information Technology)

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Yash Dewangan (Exam Seat No. T20230) Vaibhav Suryawanshi (Exam Seat No. T20222)

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# Acronyms

NB	NetBeans Apache 12.1
DBMS	Database Management System
JDK	Java Development Kit
SQL	Structured Query Language
GUI	Graphical User Interface
IDE	Integrated Development Environment

## **Abstract**

The basic purpose of the project "ASSIGNMENT MANAGEMENT SYSTEM" is to develop software that keeps record of the Assignments submitted by the Students to give realtime information about them. With this project we can maintain various records and perform operations on them. We can keep track of students who are submissiting projects on time or not. This project will help to ease the workload of the Teacher working in the College or School and will also execute jobs which used to be done on paper in an errorless manner. With the help of this project, we can thus evaluate the Assignments and give them Remarks and Marks based on their Assignments . It thus decreases the tiresomeness of the job to a great extent. This software increases the efficiency of the operations performed in Assignment Submission.

## Introduction

#### 1.1 **Motivation**

This **Assignment Management System** is for all students and teachers of the college or School. Our system is extremely useful to both the administrator, the teachers and the students as it is very simple and efficient to use and moreover the administrator can always keep the track of records and manage. The main purpose behind the design of our system is to computerise the entire traditional working of the Assignment submission system in a consolidated database system for ease of operations and maintenance. Our system also ensures communication between administrator, teachers and students is short and easy through the option of notes with assignment.

One more important purpose of our system is to solve the problem of keeping records and paper(assignments) in physical format as everything is stored in the database and tracking records becomes easier and faster through this.

One of the best to use during the time of pandemic.

### 1.2 Problem statement

To develop a software for managing the assignment submissions and records.

This system includes the following:

- Login and sign up options for users and backup table for all the users in case of any database error.
- 2. Feature to create and submit assignments.
- Feature to check assignment status for both teachers and students as well as they can manipulate them.
- 4. Dashboards for users logout and instantly exit feature

### 1.3 Framework of proposed work in project

There is login and sign up option for both teacher and student, by entering username and password they can do it. The teacher can create assignments through the create assignment option. For creating assignments users should enter some info like class ,division ,subject and assignment number. This information gets stored in the database and space gets created for the assignment.

On the other hand, for submitting an assignment a student should fill in some details like roll number, div, subject along which he can submit assignment or link of assignment. which gets stored in the database.

Teachers can check assignment status through the check **status** option, by entering the same details which were entered while creating the assignment. Also teachers have an option to check the status of a particular student by searching roll number.

Teachers can login to the system by entering their username and password. The teacher console provides a central view that generates various types of reports and allows the Teachers to change settings related to the resort. The GUI for both Teachers and Students would be developed in Netbeans with the help of JFrame. The database will be maintained in MYSQL Workbench. The communication between front end and database will be through JDBC drivers.

## Literature review

#### 2.1 Introduction

The current method of submitting assignments requires more space for storage and it is also time consuming as the teacher has to give separate time for it between working hours. Teacher has to keep records of this assignment in physical format and also maintain and arrange them properly.

The system is easy to use. It keeps the records in the database and teachers can go through it whenever they want.

If the current method of maintaining assignment is used then it is not possible to submit assignment for everyone, however E-mail is also one of the options for it but there is no option for confirmation. It is not possible for teachers to inform/message everyone personally. To solve this problem, there should be such a system which can make the whole process easier, allow students to submit assignments from anywhere and also allows teachers to check it anytime, anywhere.

### 2.2 Existing methodologies

Following are the existing methodologies:

- Collect assignments in physical format(Paper).
- Both teacher and student should be at one place.
- Teachers have to store lots of assignments in paper format.

•

### 2.3 Proposed methodologies

Following are the proposed methodologies:

- First User needs to create an account for login and sign up purposes. There are 2 separate options for creating an account as a Teacher or Student. For creating an account, users have to fill in some details like Year ,Branch , Div, Roll number(for student) and Name , mail id , password(for both).
- There is an online portal(Database) for creating and submitting assignments which can be accessed by both teachers & students according to their role.
- Assignment is created by entering specific details like Class, Division, Subject, assignment number.
- A teacher doesn't need to store assignments physically as a record is kept in the database.

4

• Teachers can give remarks to students after checking assignments.

## Software requirement specifications

## 3.1 Software requirements

Following are the software requirements

- NetBeans IDE 8.2 RC
- Workbench Mysql Database 8.0
- Any OS

## 3.2 Hardware requirements

Following are the hardware requirements

- Intel Pentium-based processor (Minimum 1.7GHz Pentium 4 Processor)
- Minimum 40GB HDD
- Minimum 256MB RAM
- Monitor
- Keyboard
- Mouse

## **Assumptions**

### 4.1 General Assumptions

Following are the general assumptions in the developed software:

- All the entries that are to be entered are less than the length which is already defined for each attribute.
- The following different types of users have been defined:
  - o Teachers
  - Students

### 4.2 Assumptions for Students

The assumptions from the point of view of a Students are as follows:

- Every Student automatically allotted a Roll number from his/her school or college, which is the primary key for the corresponding table. This Roll no cannot be changed at any point by any user of the software.
- In every signup, the student's registration saves in another database also for backup purposes.
- Students can be of two types: new Students who are using the Desktop application for the first time and existing Students who are already using Desktop applications.
- Students after successfully have registration they can Login anytime.
- Students can Login anytime and then submit the assignments and update or delete the assignments.

## 4.3 Assumptions for Teachers

The assumptions from the point of view of a Teachers are as follows:

- Every staff member is appointed by the College Incharge.
- Every staff member has a unique username and password which is used to login to the software database and new users can sign up also.
- Staff members have two Features Create Assignments and Check Assignments and update them.

## 4.4 Assignments Features for Students

The assumptions from the point of view of a Students are as follows:

- Every Student automatically allotted a Roll number from his/her school or college, which is the primary key for the corresponding table. This Roll no cannot be changed at any point by any user of the software.
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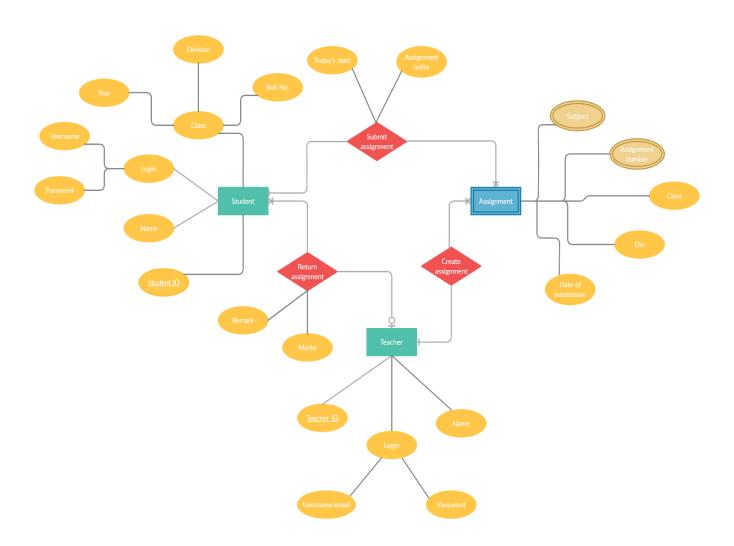
### 4.5 Assignments Features for Teachers

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- Staff members have two Features Create Assignments and Check Assignments and update them.

## E-R Diagram

E-R model i.e. Entity Relation model is based on a perception of real world that consists of set of basic objects called entities and relationship among these objects. In the E-R diagram shown below, there are 10 entity sets. The entity sets are related to each other and are shown related to each other by a diamond. Each entity contains some attributes which are related to it. A primary key is nothing but a key chosen by a designer as the principal means of identifying entities within an entity set. A primary key is represented in an ellipse by a line under it. Cardinality of relationships is mentioned as one-to-one or one-to-many.



# **Tables**

Table 6.1. Attributes of Tables.

ENTITY	ATTRIBUTES	PRIMARY KE	FOREIGN KEY
Student_info	Sid, Fullname , Email UNIQUE,	id, E mail	
	Password , Rollno UNIQUE,	Roll number	
	Division, Year, Brach		
Student_ingobackup	idb , Fullnameb , Emailb UNIQUE,	idb, eamilb,	
	Passwordb , Rollnob UNIQUE,	Rollnob	
	Divisionb, Yearb, Brachb		
teacher_info	Tid, fullname, email, password	id, email	
teacher_infobackup	idbt , fullnamebt, emailbt, passwordbt	id, email	
Assignment	Name, Rollno, Subject		Sid,Tid
	DOS(Date of submission),		
	AssName, AssFile, Remark, Mark		

Table 6.2 .Student table

ID	FullName	Email	Passwor	Roll	Year	Division	Branch
			d	number			
1	Yash	yash@gma	1234	T20	TE	II	IT
	Dewangan	il.com					
2	Vaibhav	vaibhav@	1234	T20221	TE	II	IT
	Suryawanshi	gmail.com					

(This table has detail information about Students)

Table 6.3 Student Backup table

ID	FullName	Email	Passwor	Roll	Year	Division	Branch
			d	number			
3	Mukesh	mukesh@	7777	T87878	FE	I	ENTC
	ambani	gmail.com					
4	Jethalal	akash@gm	5555	T54321	BE	II	COMP.
	gadha	ail.com					

(This table is created when some value gets removed from main table it stores in backup table using triggers)

Table 6.4 Teacher table

ID	Full name	Email	Password
1	Ratan Tata	Ratan@gmail.c om	2088
3	Sumit Koplekwar	sumit@gmail.c	3555

(This table has detailed information about Teacher)

Table 6.5 Teacher Backup table

ID	Full name	Email	Password
1	Sachin	sachin@gmail.	3333
	Tendulkar	com	
3	Samrendra	sam@gmail.cc	4324
	Yadav	om	

(This table is created when some value gets removed from main table it stores in backup table using triggers)

### Table 6.6 Assignment table

#### sedbmsdiv2ass6

(SE - Second year, dbms - Database management system (subject), div2-division, ass6 -

Assignment number)

Name1	ROLL	Date of	Assignment	Assignment	Remark	Marks
	NUMBER	Submission	Notes	File		
		(DOS)				
Yash	T54543	12-12-2020	All	https://work	Good	10/10
Dewangan			functions	space.googl		
			done	e.com/intl/e		
				n_in/produc		
				ts/drive/		
Vaibhav	T88558	12-12-2020	Login page	https://work	Good	8/10
Suryawansh			is created	space.googl		
i				e.com/intls/		
				drive/		

(This table gives the detailed information about the assignment given for which students , last date of submission , remark , marks etc.)

Table 6.7. Assignment table

#### teosdiv1ass8

(te - Third year, os - Operating system (subject), div1- division, ass8 - Assignment number)

Name1	ROLL	Date of	Assignment	Assignment	Remark	Marks
	NUMBER	Submission	Notes	File		
		(DOS)				
		, ,				

Sumit	T3333	20-12-2020	done	https://work	Good	9/10
Koplekwar				space.googl		
				e.com/intl/e		
				n_in/produc		
				ts/drive/		
Akash	T11111	23-12-2020	All Done	https://work	Excellent	9/10
Gaurav				space.goog		
				drive/		

Table 6.8. Assignment table

#### feemdiv1ass5

(fe - First year, em - Engineering mechanics (subject), div1- division, ass5 - Assignment number)

Name1	ROLL	Date of	Assignment	Assignment	Remark	Marks
	NUMBER	Submission	Notes	File		
		(DOS)				
Sumit	T88888	27-12-2020	done	https://work	Good	9/10
Suryawansh				space.googl	efforts	
i				e.com/intl/e		
				n_in/produc		
				ts/drive/		
Akash	T24121	7-12-2020	All Done	https://work	Excellent	10/10
Dewangan				space.goog		
				drive/		

### Table 6.9. Assignment table

#### sedsdiv2ass7

(se - Second year, ds - Data Structure (subject), div1- division, ass8 - Assignment number)

Name1	ROLL	Date of	Assignment	Assignment	Remark	Marks
	NUMBER	Submission	Notes	File		
		(DOS)				
Sumit	T3333	20-12-2020	done	https://work	Good	9/10
Koplekwar				space.googl		
				e.com/intl/e		

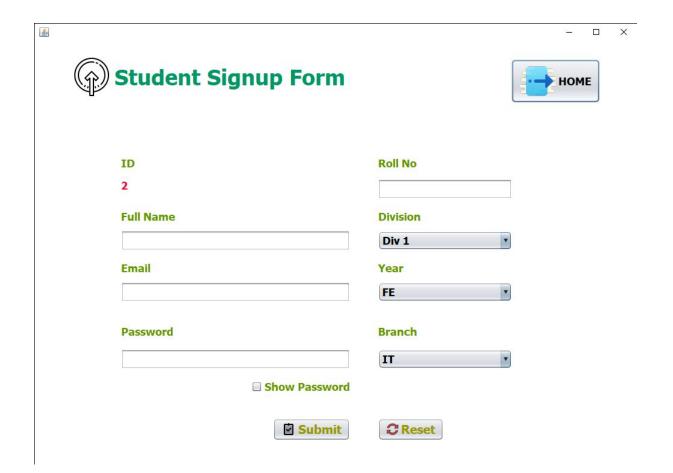
				n_in/produc		
				ts/drive/		
Akash	T11111	23-12-2020	All Done	https://work	Excellent	9/10
Gaurav				space.goog		
				drive/		

## **Forms**

# **Welcome**



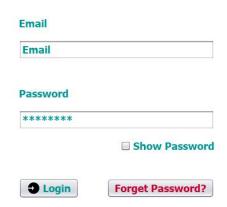
Form 7.1. Welcome Screen. (Entry form forTeachers & students)



Form 7.2. Student sign up form (Collects personal information of Students)







Form 7.3. Student Login page.. (Student can login through it)

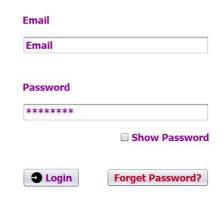




ID 2	
Full Name	
Email	
Password	
rassword	
Register	Show Password  Reset

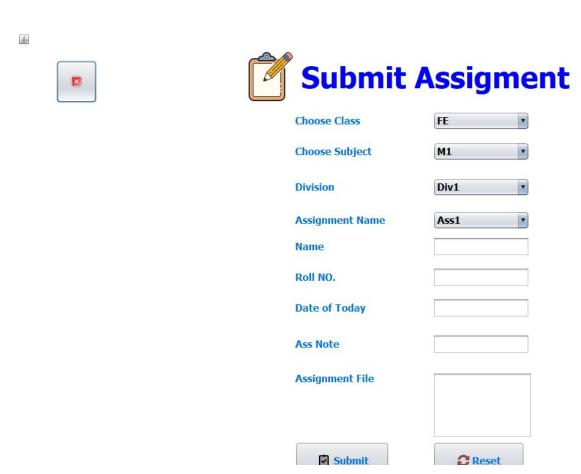




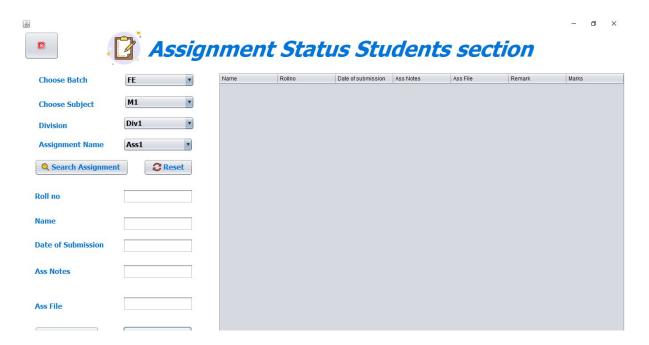


Form 7.5. Login page for teachers (Teacher can login and start operations)





Form 7.7 Submit assignment page for students (This Page is for submitting assignment)



Form 7.8 Assignment status section for students

(This form provides facility to check assignment status for students)

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### **OTeacher Dashboard**



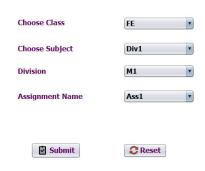


Form 7.9 Teacher's dashboard

(This form provides teachers to go to create assignment and checking assignment options) - □ >







Form 7.10. create assignment page

(This form provides teacher to create assignment for teachers)



Form 7.11. Check assignment status page

(This form provides a facility to teachers to check the assignment status of students. teacher can also search student and update status)

### **Features**

The software developed is a distributed database system. Various Features are added. Both the student users and teachers users can login to the system by using any terminal and interact with the software. The prominent features of the software can be described as follows;

### 8.1 Student Dashboard

Students can Login but first they have to use the valid Rollno. for Registration. After Successfully Login they have 2 option 1st Submit Assignments and 2nd Update or check Assignment status.

## 8.2 Assignment Submission (Students)

The software maintains a comprehensive database containing all the relevant details of every Student who has registered. The tasks performed by the Students should first upload in the Google drive. After that copy the link and to the dashboard of student, click on the submit assignment button then fill the form and you are good to go

### 8.3 Assignment Check Status (Students)

The software maintains a comprehensive database containing all the relevant details of every Student who has registered. The Students can update, check or remove submitted Assignments and their related information from the database at any time. The various attributes belonging to Assignment information are used to verify whether a particular Student is allowed to submit Assignment, depending on his/her class they are studying. Every Student has Class and Roll no associated with it, namely Subject and Assignments.

### 8.4 Teachers Dashboard

The software maintains a comprehensive database containing all the relevant details of every Student who has registered. Teachers can Login but first they have to Create an account in Assignment Portal. After Successfully Login they have 2 option 1st Create Assignments and 2nd Update or check Assignment status.

## 8.5 Create Assignment (Teacher)

Using the data in the various tables present in the database, a variety of reports can be generated in the administrator console. So of these reports include:

#### • Create Assignments

o Create Assignment on the basis of Year, Division, Subject and Assignment number

## 8.6 Assignment Check Status

The software maintains a comprehensive database containing all the relevant details of every Student who has registered. The Teacher can update, check or remove submitted Assignments and their related information from the database at any time. The various attributes belonging to Assignment information are used to verify whether a particular Teacher is allowed to Check Assignment, depending on his/her class they are teaching. Every teacher has allotted or associated every class with it, namely Subject and Assignments.

## **Conclusion**

The basic purpose of the project "ASSIGNMENT MANAGEMENT SYSTEM" is to develop software that keeps record of the Assignments submitted by the Students to give realtime information about them. With this project we can maintain various records and perform operations on them. We can keep track of students who are submissiting projects on time or not. This project will help to ease the workload of the Teacher working in the College or School and will also execute jobs which used to be done on paper in an errorless manner. With the help of this project, we can thus evaluate the Assignments and give them Remarks and Marks based on their Assignments . It thus decreases the tiresomeness of the job to a great extent. This software increases the efficiency of the operations performed in Assignment Submission.

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