

A  
PROJECT REPORT  
ON  
"COURSE MANAGEMENT SYSTEM"

FOR



Arts, Commerce & Science College, Sonai



SUBMITTED TO  
SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

BY

Miss. Darandale Rupali Vitthal

Miss. Sathe Sapana Anil

Under the Guidance of

Prof. Nangare Y.L.

IN PARTIAL FULLFILLMENT OF  
BACHELOR OF COMPUTER APPLICATIONS

FOR THE ACADEMIC YEAR

2018-2019

**A**

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Mula Education Society's  
**ARTS, COMMERCE & SCIENCE COLLEGE SONAI**

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Affiliated to Savitribai Phule Pune University (LD.PU/AN/ASC/031/1989)  
NAAC REACCREDITED 'A' GRADE and ISO 9001 : 2008 CERTIFIED

Date: 22-8-19

## CERTIFICATE

This is to certify that Miss. Darandale rupali vitthal & Miss. Sathe Sapana Anil are bonafide students of Arts, Commerce and Science College, Sonai have successfully completed the Mini project work as prescribed by the Savitribai Phule Pune University, Pune in the partial fulfillment of the requirement of Third Year, Bachelor of Business Administration (Computer Application).Program for the academic year 2018-2019.

The Project Work titled as "Course Management System".

Mr. Yogesh Nangare

Project Guide

External Examiner

Mr. Admane S.L. (CA)  
HOD  
Arts, Commerce & Science  
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Dist. Ahmednagar - 414105

Internal Examiner

## DECLARATION

We hereby declare that the project work entitled, "Course Management System" submitted under the guidance of **Mr. Yogesh Nangare** is our original work completed under the four walls of our institute.

The Report submitted is our own work and has not been duplicated from any other source. We shall be responsible for any unpleasurmoment /situation.

**Miss. Darandale Rupali Vitthal**

**Miss. Sathe Sapana Anil**

## ACKNOWLEDGEMENT

At every outset we express my gratitude to almighty lord for showering his ~~grace~~ and blessings upon me to complete this project.

Although our name appears on the cover of this book, many people had contributed in some form or the other form to this project Development. We could not done this project without the assistance or support of each of the following we thank you all.

We wish to place on my record my deep sense of gratitude to my project guide, for his constant motivation and valuable help through the project work. Express my gratitude to and **Mr. Yogesh Nangare** of Arts, Commerce & Science College, Sonai for her valuable suggestions and advices throughout the **B.B.A (CA)** course. We also extend my thanks to other faculties for their Cooperation during my Course.

Finally we would like to thank my friends for their cooperation to complete this project.

**Miss. Darandale Rupali**

**Miss. Sathe Sapana Anil**

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## Introduction

A course management system is set of tools that enable the instructor to create course content information. This become an integral part of education system they create teaching and course management system is easier by providing a set of tools for instructors the system is executive to include class rosters and therefore ability to record students grades. Course management system software are used in college and universities to get in touch from any location to get students from different branch can register with application and submit work and get grades. The course management system tools additionally focus on all aspects of teaching, learning, and teacher student interaction. Every education or courses there should be consistent interaction between students for submitting assignments and homework projects etc. and acquire feedback. This system extremely secures very reliable and attributable to the safety features provides for the course management system. This system cannot access the unauthorized user.

This system produces three modules

**1] Administrative module.**

**2] Student module.**

**3] Instructor module.**

1] Administrative module -:

Administrator module is for controlling administrative works such as creating account for student and instructor.admin can produce accounts for college students and faculties make course programmed list and add instructor students to its course list.

2] Student module -:

Student can register with application of system and login username and password. He will check and submit homework and every student have id.

3] Instructor module -:

It checks student's homework or the assignments and assign grades to the students.

### Existing system and its Limitationss

The existing system was consisting of the manual work which was written by hand on the paper. All the record maintained manually. The system analysis is detailed study of the various operation performed by a system and their relationship within the outside of the system analysis begins a study of the program using existing system. *Due to manual system, accuracy decrease.*

During analysis data collected on the various files , decision point and transaction handled by the present system training, experience are required for collection of relevant information needed to develop the system .

In this Existing system students needs to visit faculties and take appointment from faculties or instructor to submit work.



## Limitations

- Very much paper work was required for the system.
- It is time consuming.
- To maintain the record is large in size & after 10 years Papers are disposed.
- Therefore no Data backup is possible
- Due to manual system, accuracy decreases.

1) Rapid information processing.

2) Accurate report generation.

3) Less paper work.

4) Fast & reliable information distribution.

5) Reduction in cost.

6) Time saving.

## Scope of the project

The course management system helps collecting perfect in details. In a very short time collection will be obvious, simple and sensible. It also helps to the current all works relative to course management system. It will be also reduce the cost of collecting the management and collection procedure go on smoothly.

- 1) Rapid information processing.
- 2) Accurate report generation.
- 3) Less paper work.
- 4) Fast & reliable information distribution.
- 5) Reduction in cost.
- 6) Time sharing

### 2) Minimum Hardware Requirements

Physical requirements i.e. Monitor, CPU, Mouse, Printer etc. are called as Hardware requirements.

- RAM : 4 GB
- Hard Disk : Minimum 150 GB
- Printer : laser printer
- Keyboard : Standard 102-key Keyboard
- Display : Mobile pc display

## Requirements Specifications

### 1) Minimum Software Requirements:

Software is the collection of programs. For running of the system Software is needed.

- Operating System : Windows XP & above Versions
- Software : Net Beans IDE 8.1  
Database: oracle 10g  
Report: Jasper Report,  
Documentation: MS Office

### 2) Minimum Hardware Requirement:

Physical requirement i.e. Monitor, CPU, Mouse, Printer etc. are called as Hardware requirements.

- RAM : 4 GB
- Hard Disk : Minimum 160 GB
- Printer : laser printer
- Keyboard : Standard 102-key Keyboard
- Display : Mobile pc display

### Need of the proposed system

- 1 To keep the course management system record accurate for long years.
- 2 All important data is maintained.
- 3 Data accuracy.
- 4 Fast and reliable information distribution.
- 5 The automated system is time savings and better performance than the manual based system.
- 6 Home comfort.
- 7 Cost savings.
- 8 Schedule flexibility.

## Objective of the proposed system

- To reduce the paper work.
- To save record permanently.
- To easily find records.
- To make system cost effective.
- To make system time effective.
- To retrieve information to minimum time.
- To make error free system.
- To make suitable system for resources sharing and networking.

### 1. Interview

### 2. Questionnaire

### 3. Record Review

### 4. Observation

### 1) Interview:-

Interviews are used to collect information from individuals or from groups. Interviews are not the best source for collecting the information because the time required from respondents. The interview is best method for producing the qualitative information like opinion, policies & subjective description of activities & problems.

### 2) Questionnaire:-

Questionnaire is used to collect information about various aspects of culture from a large number of persons. The use of standardized questionnaires can produce more reliable data than free listing techniques. However, the method does not allow subject to observe the respondents or reactions of respondents.

## Fact Finding Techniques

### Introduction:-

Right from encountering the problem till the analysis, design & implementation of system, information about various aspects & expectations from the system is collected. Analyst used for collecting data about requirements is called.

Fact Finding There are four techniques are used for this purpose:

#### **1. Interview**

#### **2. Questionnaire**

#### **3. Record Review**

#### **4. Observation**

#### 1) Interview:-

Interviews are used to collect information from individual or from groups. Interviews are not the best source for collecting the information because the time required from respondents. The interview the best method for producing the qualitative information like opinion policies & subjective description of activities & problems.

#### 2) Questionnaire -:

Questionnaire is used to collect information about various aspects of system from a large number of person .The use of standardized question format can produce more reliable data other fact finding technique. However this method does not allow analyst to observer the expressions or reactions of respondents.

### 3) Record views -:

Many kinds of records & reports can provide valuable information about organization & operation. In record views analyst examines information that has been recorded about the system & about the user. Records include writer policy manual, regulations & standard operating producers used by most organization is guide for manages & employee. Records do not show what activities are actually occurring, who takes the decision, how the task is performed etc.

### 4) Observation -:

Observation allows the analyst to get information which they .Cannot obtained any other fact finding technique. Through the observation analyst can obtain the first hand information about how activities are carried out. This method is very useful when the analyst need to be actually observe how documents are handled , how processes are carried out & whether Specified steps are actually followed or not.

## Feasibility Study

### Introduction:-

Feasibility study is very important for any proposed model. It gives us direction to implement the project system.

These are as follows:

- 1. Technical Feasibility Study**
- 2. Economic Feasibility Study**
- 3. Operational Feasibility Study**
- 4. Behavioral feasibility study**

#### 1). Technical Feasibility Study:

Technical study is the of hardware and software requirements that is technical requirements of the new system to inform management about this requirement in order to know user and management views towards technical study.

#### 2). Economic Feasibility Study:

Economical study is study of actual cost and benefits of the system. Actual cost of the system is calculated in economic study so as to inform the user and management that this much cost is required to develop the system.

#### 3). Operational Feasibility Study:

The system is user friendly and easy to use. Only a few instructions may require to be given to the user who then can easily operate the system. Anyone can operate with some knowledge about computer will handle the system easily. It saves money or training.



#### 4). Behavioral feasibility study:

As computer does the job of many people less number of peoples required, replacing the existing system with the computerized system will not affect the job employment of the existing system

Data Object: - A data object of some type represents information that can be accessed by software. Computer information bases involving data are a different matter of data and properties of objects.

A data object can be created entity domain or many of set of objects. The data object description incorporates the data object and all its attributes. They objects are related to one another and many data objects. Data is the reference to operations that act on the data.

E-R Diagram: - E-R diagrams are graphs that model logical structure of a database graphically. The E-R model is one of the several models of data model. The structure aspect of data model has to do with mapping the meaning and structure of real world concepts into computer terms.

Data Flow Diagram: - A DFD is a graphical technique that depicts information flow and transforms the data that moves from input to output. The DFD is also known as Data Flow Graph or Module Chart.

## SYSTEM ANALYSIS

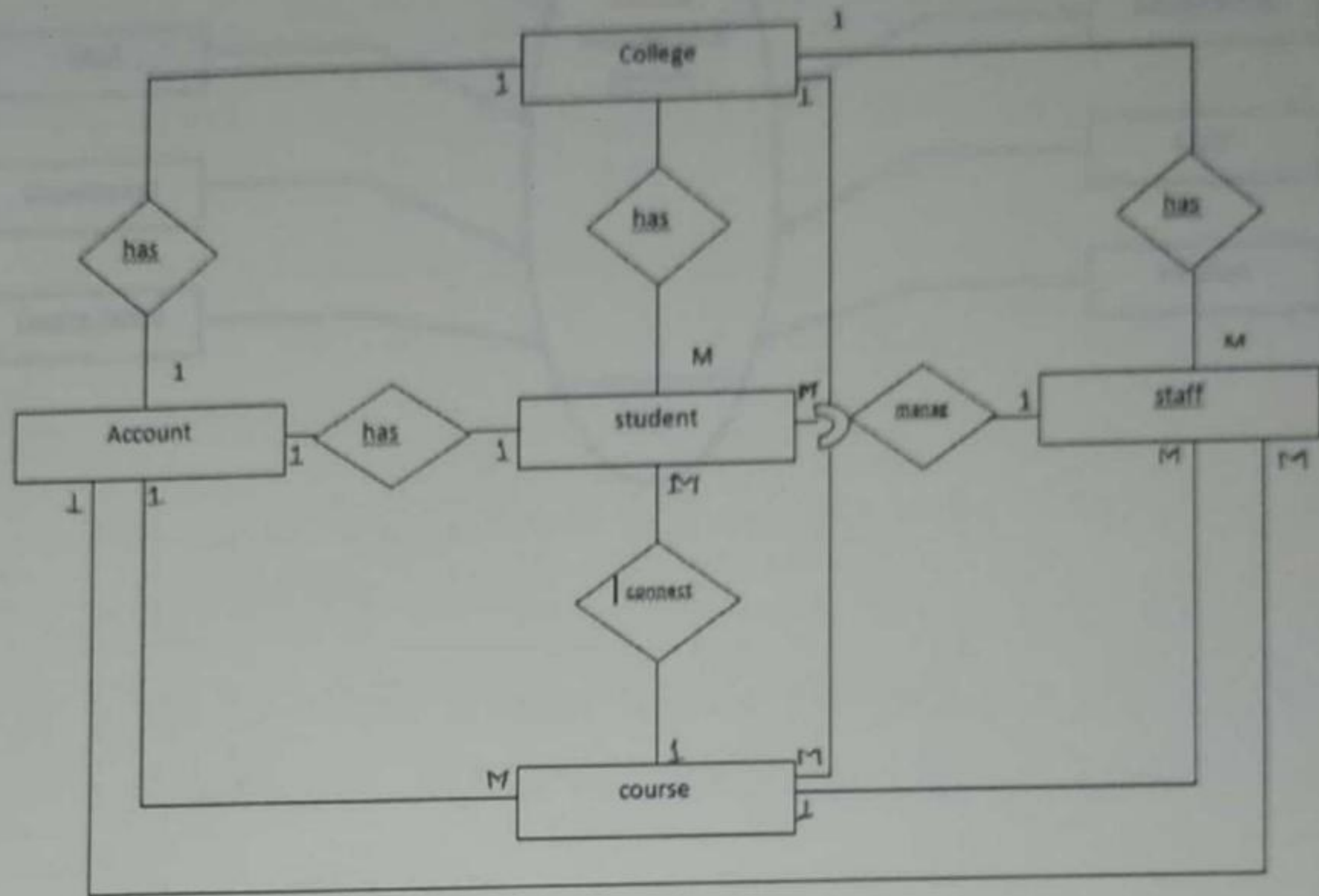
**Data Objects:** - A data object of almost any composite information that can be understood by software. Composite information means something that has a different number of different properties or attributes.

A data object can be external entity defines in terms of set of attributes. The data object description incorporates the data object and all its attributes. Data objects are related to one another and encapsulate data only; there is no reference to operation that act on the data

**E-R Diagrams:** - E-R diagrams can express the overall logical structure of a database graphically. The E-R model is one of the several semantic data model. The semantic aspect of data model lies in attempt to mapping the meaning and interaction of real world enterprises into conceptual scheme.

**Data Flow Diagrams:** - A DFD is a graphical technique that depicts information flow and transforms the data that moves from input to output. The DFD is also known as Data Flow Graf or Bubble Char

# ERD DIAGRAM



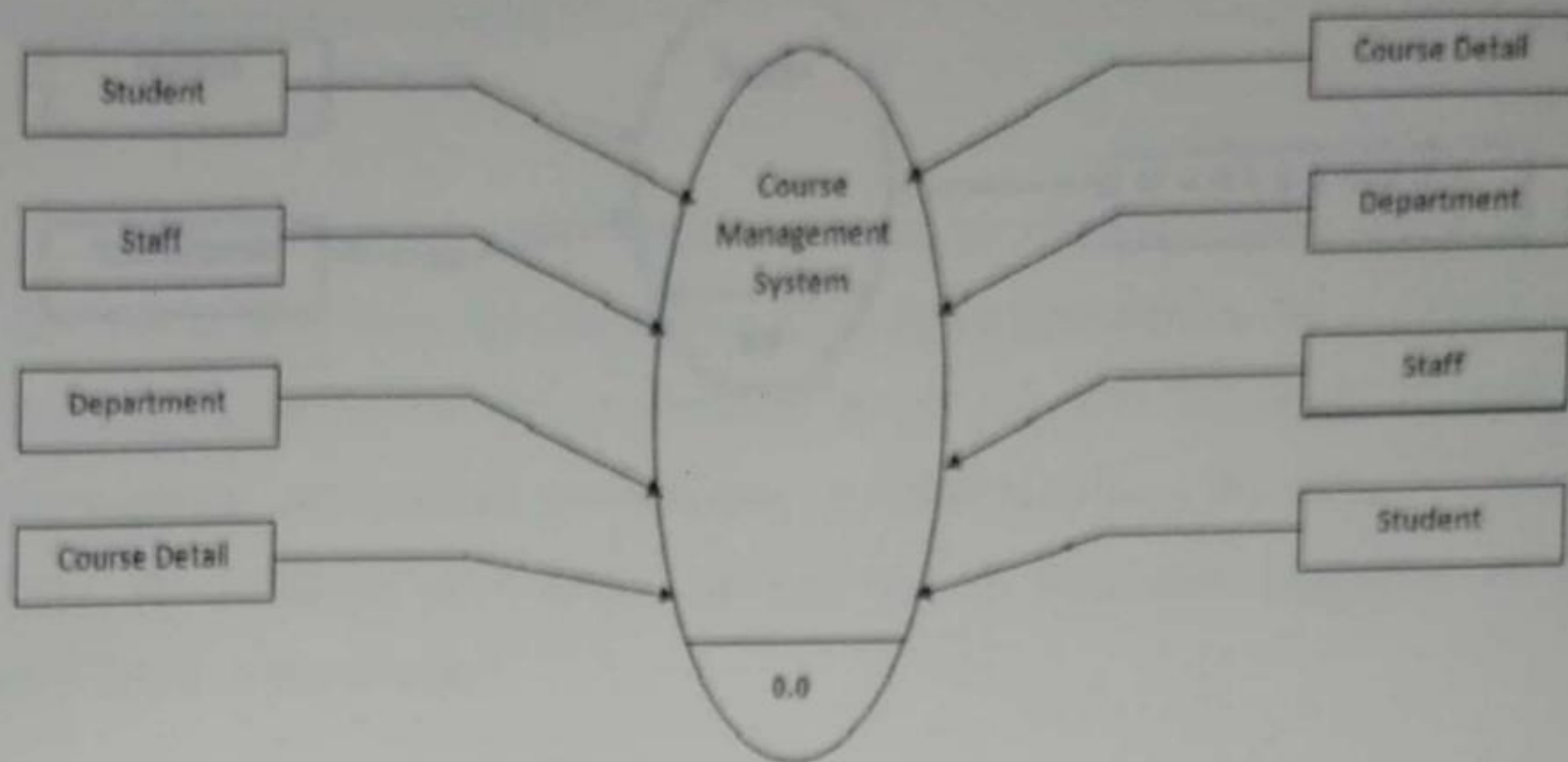
## 2. Master Update



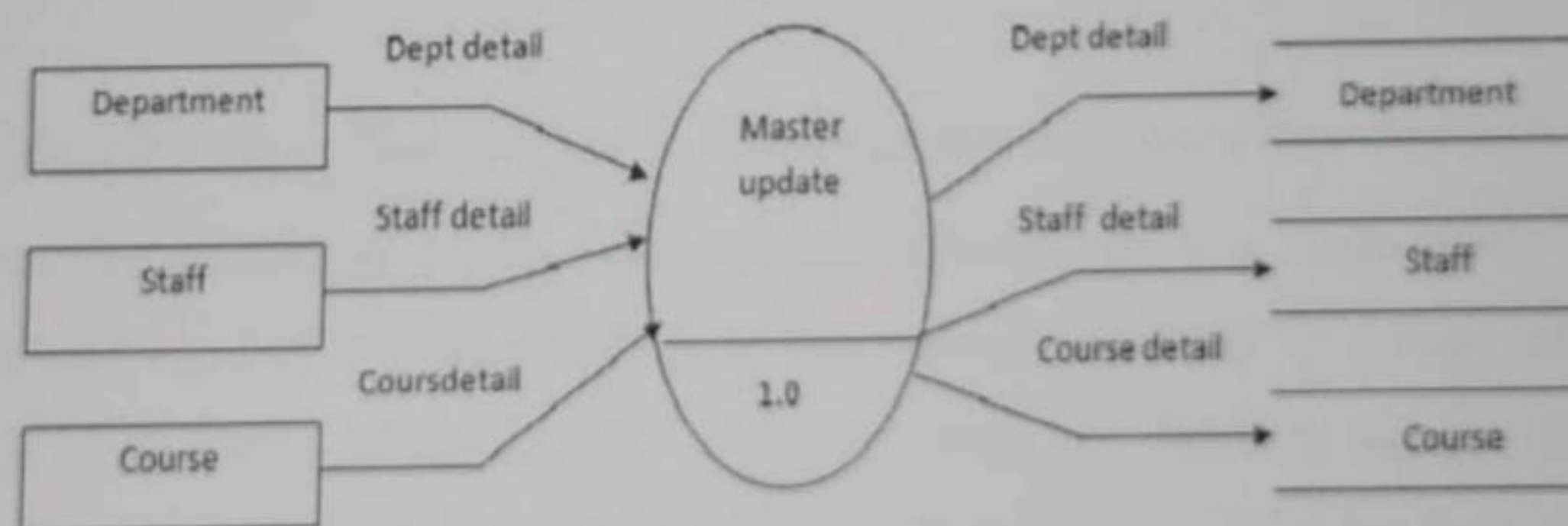
## 3. Transaction Update



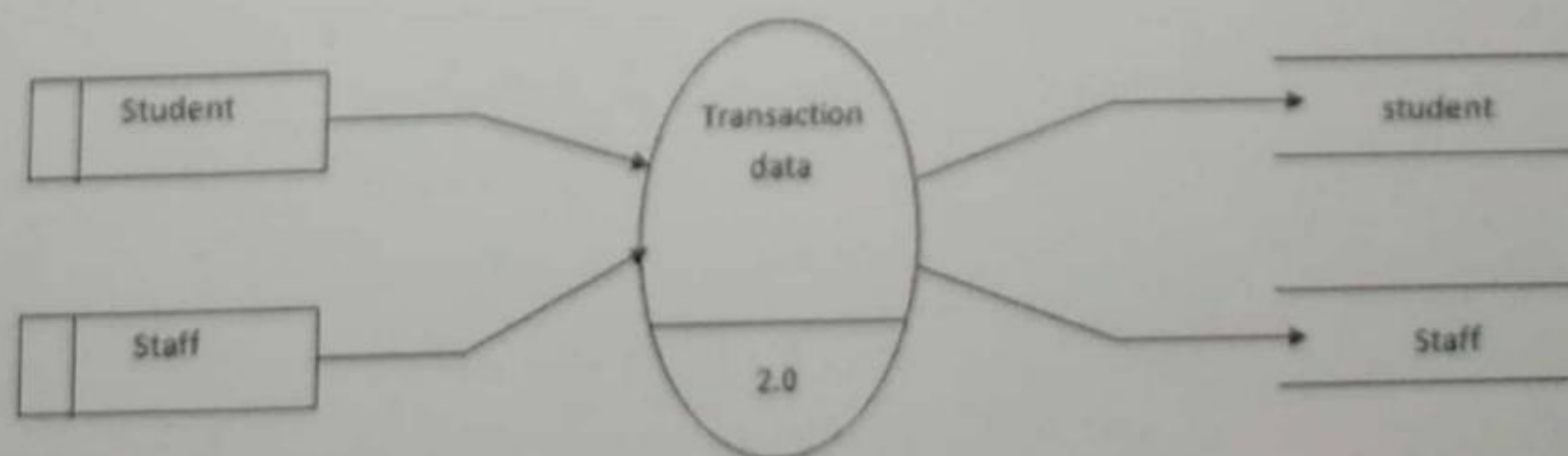
### 1.Context level



### 2.Master Update

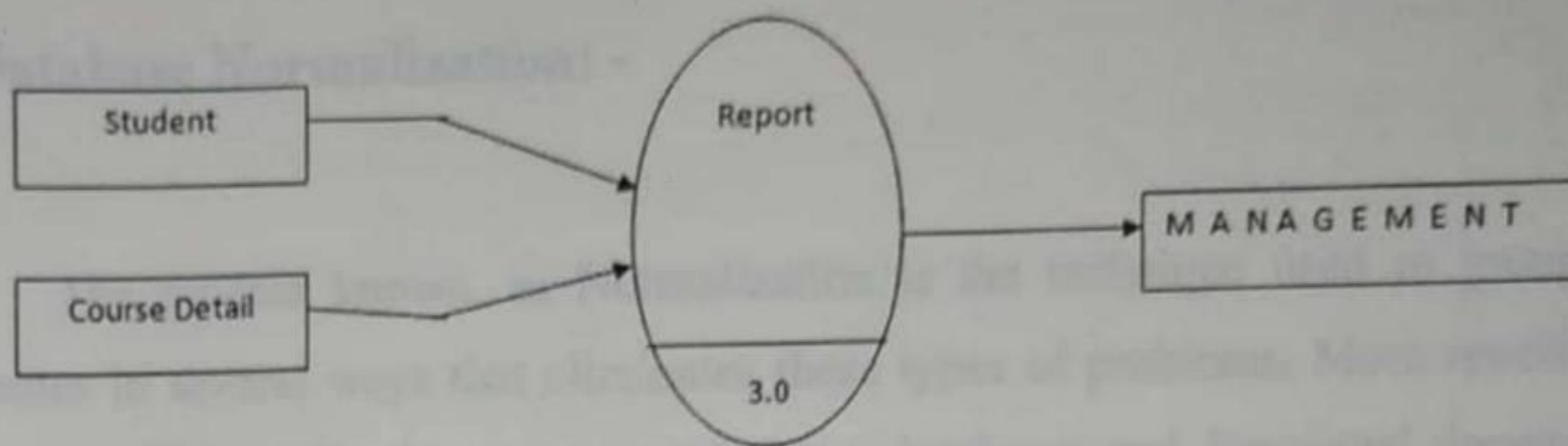


### 3. Transaction Update



## 4. Report

## SYSTEM DESIGN



... types of problems. More specifically, the goal of Normalization is to minimize redundancy and functional dependency within a database. The value of one attribute can be determined from the value of another attribute. If defining all non-key attributes will be functional dependent on the primary key attribute.

If we don't follow the rules we will face the problem of data redundancy which will result in data inconsistency.

So to overcome these problems Normalization process is used for better organization. Thus we have tried our level best to normalize the data to overcome these problems.

Table Design: This module is containing the different tables that are being utilized by the system. All the tables are normalized up to third normal form. Their requirements of all the users were taken into consider during the actual data that needs to be stored in the system. While designing the database records for the system proper care has been taken for not allowing the duplicate records and unnecessary redundancy of data.

## SYSTEM DESIGN

### **Database Normalization: -**

The process known, as Normalization is the technique used to group that attributes in several ways that eliminates these types of problems. More specifically the goals of Normalization are to minimize redundancy and functional dependency occurs when the value of one attribute can be determined from the value of another attribute. By definition all non-key attribute will be functional dependent on the primary key in every relation.

If we denormalise the tables we will face the problem of data redundancy which will result in data inconsistency.

So to overcome these problems Normalization process is must for future convenience. Thus we have tried our level best to normalize the data to overcome these problems.

**Table Design:** - This module is consisting the different tables that are being utilized by the system. All the tables are normalized up to third normal form. Their requirements of all the users sure taken into consider deciding the actual data that needs to be stored in the system. While designing the database records for the system proper care has been taken for not allowing the duplicate records and unnecessary redundancy of data.

S_ID	NAME	SIZE	Constraints
S_ID	NUMBER	10	Primary Key
S_DESTINATION	TEXT	20	-
S_NAME	TEXT	20	-
S_CLASS	TEXT	20	-
S_DEPARTMENT	TEXT	20	-

### 1] Table Name:- Student

<b>FIELDS</b>	<b>TYPE</b>	<b>SIZE</b>	<b>Constraints</b>
S_Id	NUMBER	5	Primary Key
S_NAME	TEXT	20	-
S_DEPARTMENT	TEXT	20	-
S_GENDER	TEXT	20	-
S_CLASS	TEXT	20	-
S_EMAILID	TEXT	20	-
S_DURATION	TEXT	20	-

### 2] Table Name:- staff

<b>FIELDS</b>	<b>TYPE</b>	<b>SIZE</b>	<b>Constraints</b>
COURSE ID	NUMBER	10	Primary Key
CLASS	TEXT	20	-
SUBJECT	TEXT	20	-
DURATION	TEXT	20	-

### 2] Table Name:- staff

<b>FIELDS</b>	<b>TYPE</b>	<b>SIZE</b>	<b>Constraints</b>
S_ID	NUMBER	10	Primary Key
S_DESIGNATION	Text	20	-
S_NAME	TEXT	20	-
S_CLASS	TEXT	20	-
S_DEPARTMENT	TEXT	20	-

3) Table Name: Department form

FIELD	TYPE	SIZE	Constraints
DEPT ID	NUMBER	10	Primary Key
DEPT NAME	TEXT	20	-
CLASS	TEXT	20	-
DURATION	TEXT	20	-

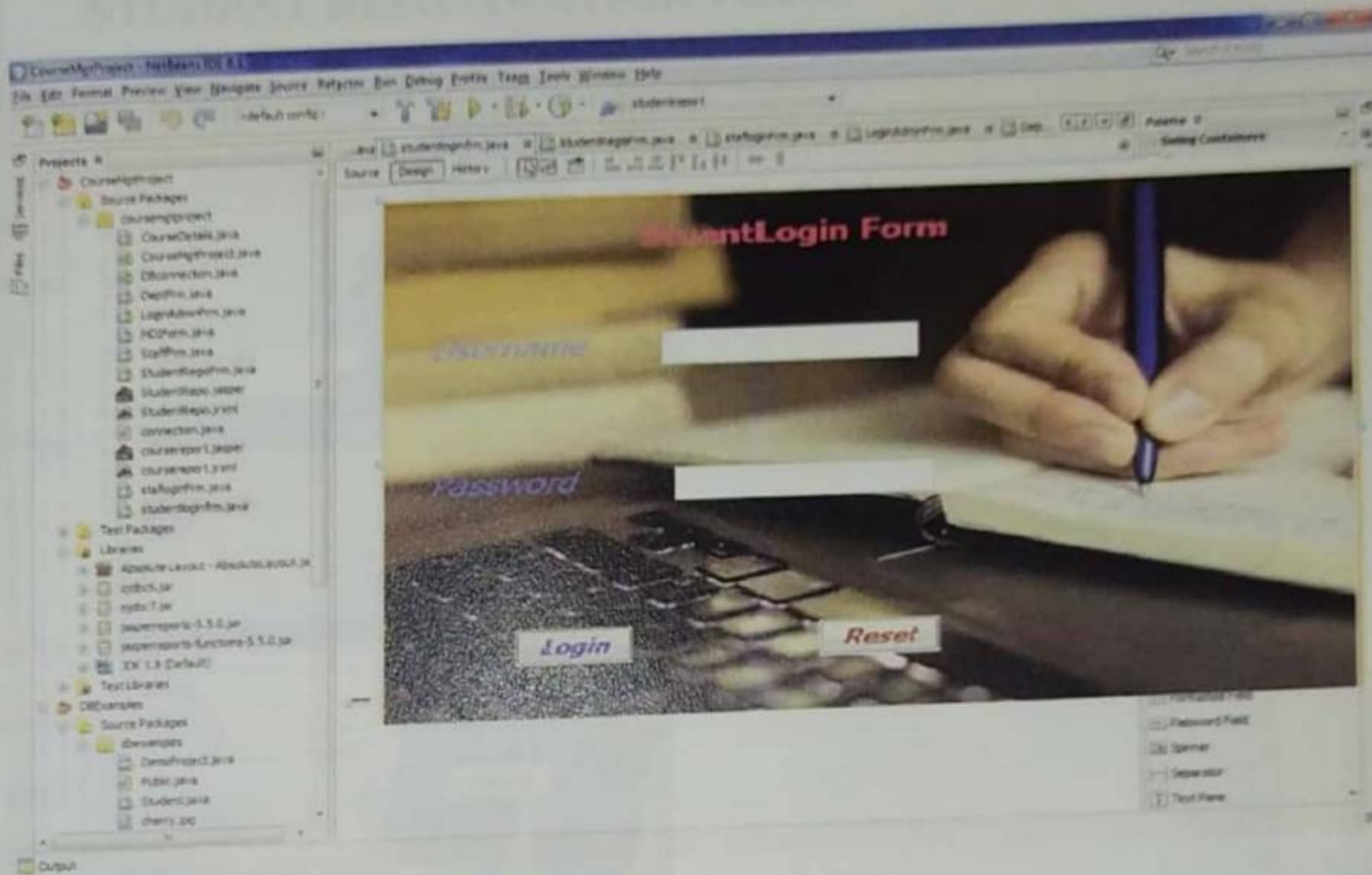
4) Table Name: Course Details form

FIELD	TYPE	SIZE	Constraints
COURSE ID	NUMBER	10	Primary Key
CLASS	TEXT	20	-
SUBJECT	TEXT	20	-
DURATION	TEXT	20	-



## INPUT/OUTPUT SCREENS

### Student Login Form



# STUDENT REGISTRATION FORM

**Student Registration Form**

Student Id: 11

Name: ganesh darandale

Department: [Empty]

Gender: [Empty]

Class: [Empty]

E-mail Id: [Empty]

Duration: 4 month

username: ganesh

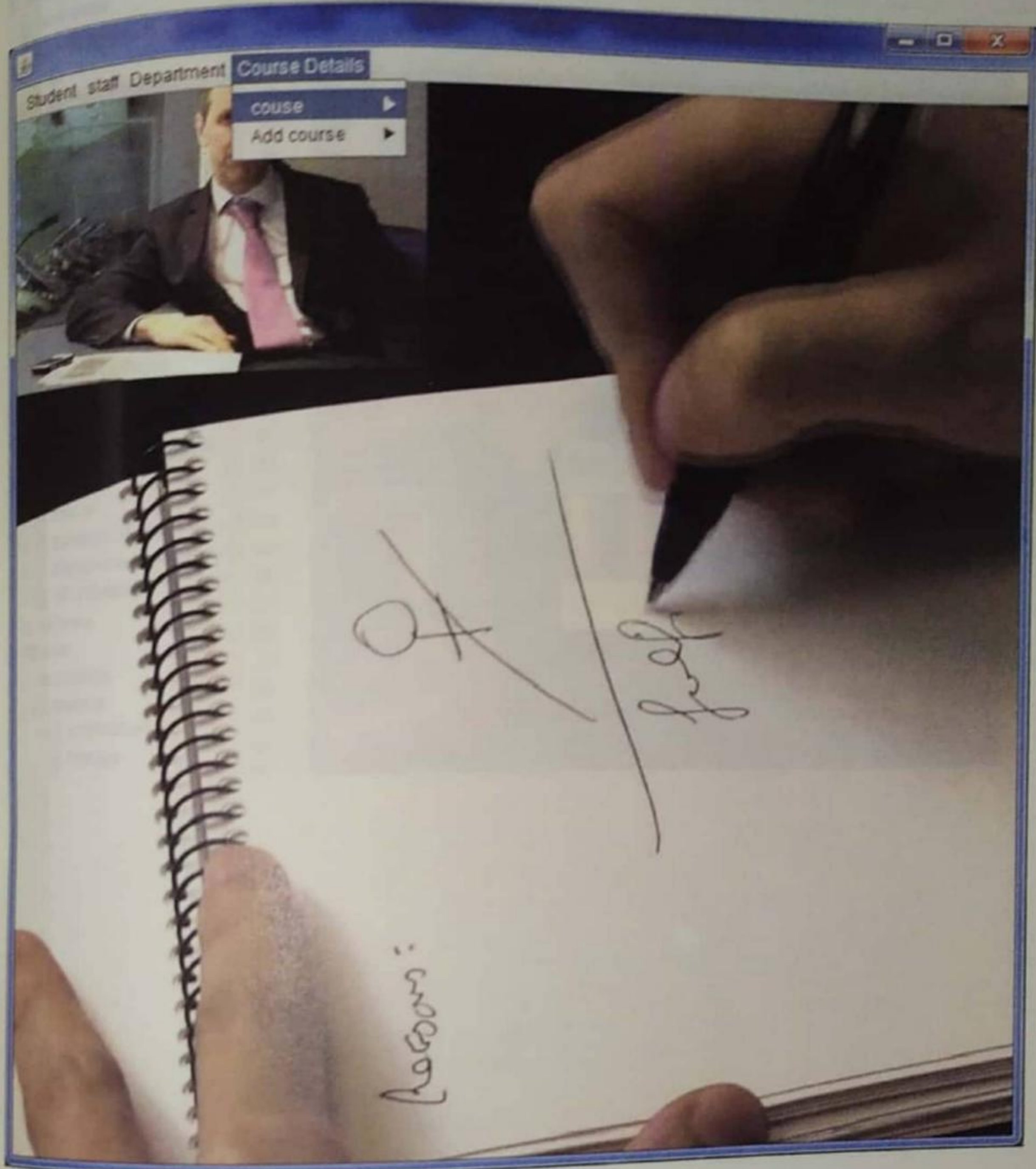
password: [Empty]

Buttons: Submit, Update, Cancel

Message: saved

Taskbar: Report Problems Window, Report output, Output, CourseProject (run), 12:00 AM, 3/24/2019

MDI FORM

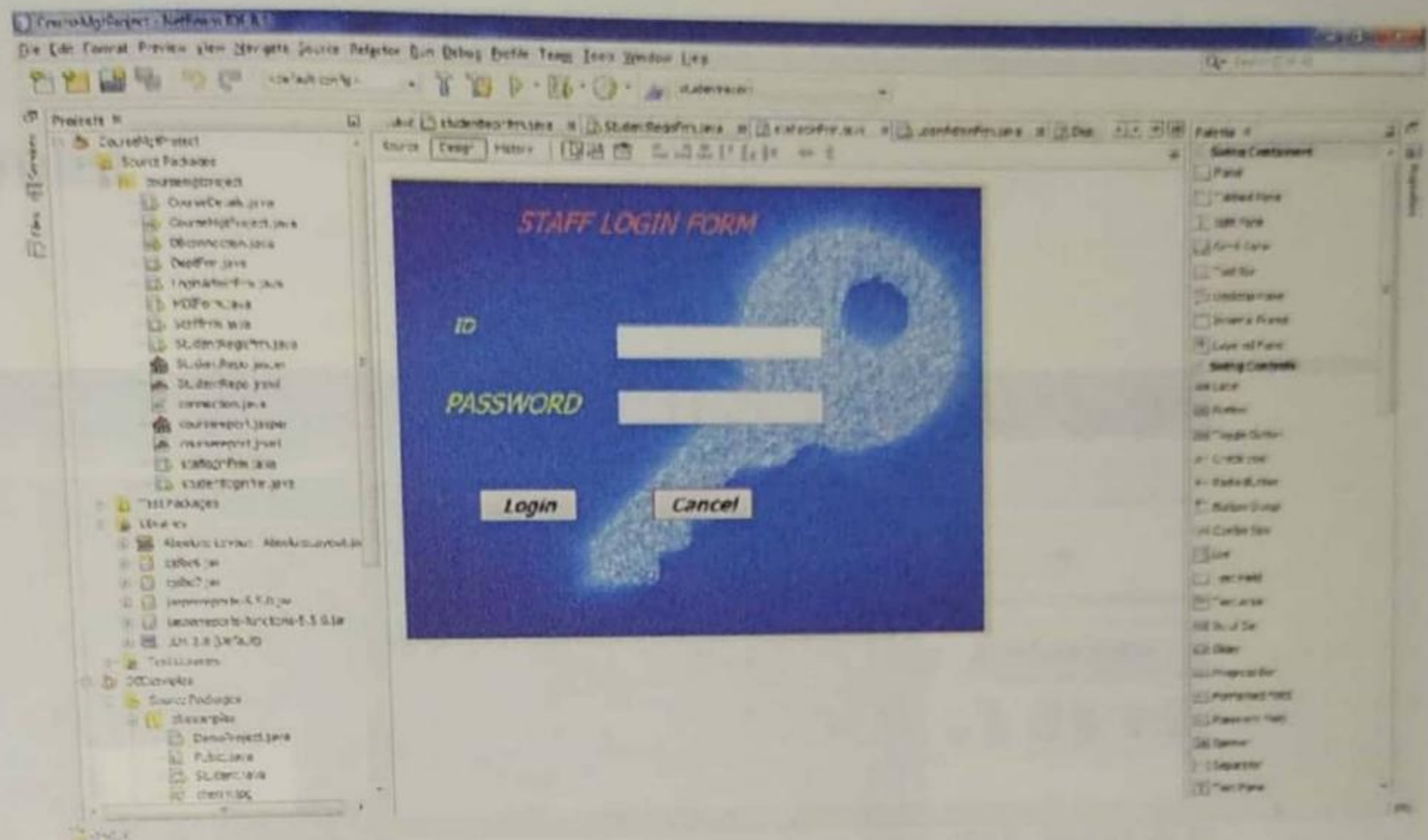


# Department form

STAFF LOGIN FORM

The screenshot displays an IDE window with a design view of a 'Department Form'. The form is set against a blue background with a collage of educational-related images. It contains three input fields: 'Id' (a text box), 'DeptName' (a dropdown menu with 'BCA' selected), and 'Duration' (a dropdown menu with 'FYBCA' selected). To the right of these fields are three buttons: 'SAVE', 'Update', and 'Delete'. The IDE's interface includes a 'Source' tab, a toolbar with various icons, and a project explorer on the left. The project explorer shows a hierarchy of source packages and test packages, with a list of Java files including 'CourseDetails.java', 'CourseMgtProject.java', 'DBconnection.java', 'DeptFrm.java', 'LoginAdminFrm.java', 'MDIFrm.java', 'StaffFrm.java', 'StudentRegisFrm.java', 'connection.java', 'mdfrm.java', 'staffloginfrm.java', and 'studentloginfrm.java'. Below the source packages are test packages and libraries, including 'Absolute Layout - AbsoluteLayout', 'ojdbc6.jar', 'ojdbc7.jar', 'jasperreports-5.5.0.jar', 'jasperreports-functions-5.5.0.jar', and 'JDK 1.8 (Default)'. The IDE also shows 'Test Libraries', 'DBExamples', and 'Source Packages' with files like 'dbexamples', 'DemoProject.java', and 'Public.java'. A line number indicator on the left side of the design view shows lines 29 through 156.

# STAFF LOGIN FORM



## STAFF FORM

**STAFF FORM**

ID: 6

Designation: Teacher

Name:

Department:

Class:

Username: Bharti.g

Password:

SAVE [ ] EXIT

Message: Saved

OK

# COURSE DETAILS

The screenshot shows a Java Swing application window titled "COURSE DETAILS". The window contains a form with the following fields:

- ID**: A text input field containing the value "8".
- Class**: A dropdown menu with "SYBCA" selected.
- Subject**: A text input field.
- Duration**: A text input field.

A "Message" dialog box is overlaid on the form, displaying an information icon and the text "saved...". The dialog box has an "OK" button.

To the left of the application window, a portion of a Java code editor is visible, showing the following code:

```
Generated Code  
private void bt  
    TODO add  
    con=DBconne  
    try {  
        pst=con.prep  
        pst.setInt(1  
        pst.setStrin  
        pst.setStrin  
        pst.setStrin  
        pst.executeU  
        JOptionPane.s  
    } catch (Ex  
    }  
  
private void tx  
    TODO add  
    }  
  
private void tx  
    TODO add  
    }
```

# REPORT-COURSE DETAILS

Google Chrome isn't your default browser [Set as default](#)

## Course Details

COURSEDETAILS1_CID	COURSEDETAILS1_CCLASS	COURSEDETAILS1_CSUBJECT	COURSEDETAILS1_CDURATION
1	SYBCA	web technology	6month
2	FYBCA	recent trends in It	4month
3	SYBCA	web technology	3month
4	SYBCA	java	6month
5	TYDCA	advanced java	4month
6	FYBCA	core java	3.5month
7	FYBCA	DBMS	3 month
8	SYBCA	MS office	3 month



# REPORT – STUDENT REGISTRATION

The screenshot shows a PDF document titled "Student Registration" displayed in a browser window. The document contains a table with 11 rows of student registration data. Each row includes a student ID, name, course, gender, year, email, and phone number.

ID	Name	Course	Gender	Year	Email	Phone
1	rupali Darandale	BCA	female	FYBCA	rupali15@gmail.com 4 month	rupali
2	nikita Darandale	BCA	female	FYBCA	nikita@gmail.co 4 month	nikita
3	mahesh thorat	BCA	male	SYBCA	mahesh10gmail.com 6 month	mahesh
4	ankita admare	BCA	female	TYBCA	Ankita.gmail.co 6 month	ankita
5	mayuri	BCA	female	TYBCA	mayuri07@gmai 6 month	mayuri
6	shruti sarandale	BCA	female	SYBCA	shruti@123gmai 4month	shruti darandale
7	vishal Darandale	BCA	male	FYBCA	vishalD.gmail.co 3 month	vishal
8	vijaya	BCA	female	SYBCA	vijaya08@gmail.3 month	vijaya
9	shubham ghawate	BCA	male	FYBCA	shubham26@g 3 month	shubham
10	Sapana Sathe	BCA	female	TYBCA	sapana1107@g 65month	sapana
11	ganesh darandale	BCA	male	SYRCA	ganeshDR@gma 4 month	ganesh

## **“CONCLUSION”**

This system will make daily transaction in short time and report generate easily & correct which was so complicated in previous manual system because everything had to be carried out manually.

This system is easy to understand and operates and also user friendly.

All the difficulties of system have been removed. The user can get all the information he wants as it can help himself and he is guided throw with all the information. Also less time is required for the processing.

## **Future Enhancement**

Course management system has some future enhancements such as:

- More data accuracy
- Report generation make easier

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