PROJECT SYNOPSIS

On

"Student Information System"

Department Of Information & Technology
Microteck Institute of Information Technology
Maldahiya, Varanasi (U.P)

Month, Year

Makhanlal Chaturvedi Rashtriya Patrakarita Vishwavidyalaya, Bhopal

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TABLE OF CONTENTS

- **INTRODUCTION …….. 3**
- **OBJECTIVES …… 4**
- **TYPE OF PROJECT ……. 5**
- **ANALYSIS……... 6**
    - **DFD……..... 7**
    - **ER Diagrams…….. 12**
    - **Database Design…… 13**
- **MODULES OF THE PROJECT……..... 16**
- **TESTING METHOD …… 17**
- **TOOLS / PLATFORM, H/W AND S/W REQUIREMENT SPECIFICATIONS…….18**
- **FUTURE SCOPE AND FURTHET ENHANCEMENT OF THE PROJECT…… 19**

INTRODUCTION

Student Information System is software which is helpful for students as well as the school authorities. In the current system all the activities are done manually. It is very time consuming and costly. Our Student Information System deals with the various activities related to the students.
There are mainly 2 modules in this software

- Admin module
- Student Module

In the Software we can register as a user and user has of two types, student and administrator. Administrator has the power to add new user and can edit and delete a user. A student can register as user and can add edit and delete his profile. The administrator can add edit and delete marks for the student. All the users can see the marks.

OBJECTIVE

- To make the application of ***Student Information System*** usable for the College or Universities.
- To access the student's records and get the desired information which may require.
- To automate the existing system of manually maintain the records of the student records, Students Details, Attendance Details, Internal Marks etc.
- To increase data accuracy, make student information management more secure, effective, convenient and accessible.
- To coordinate information across the system to simplify student access to University resources

PROJECT CATEGORY

WEB BASED PROJECT

ANALYSIS

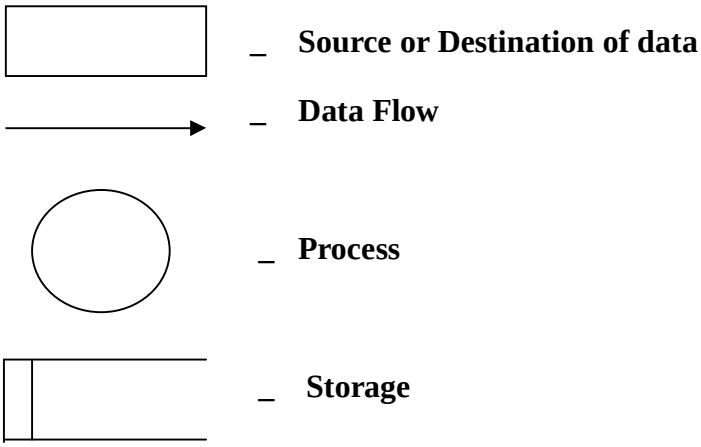
- **DFD**
- **ER Diagrams**
- **Database Design**

Data Flow Diagram

A Data Flow Diagram(DFD) is a diagram that describes the flow of data and the processes that change or transform data throughout a system. The Data Flow Diagram reviews the current physical system, prepares input and output specification, specifies the implementation plan etc.

Four basic symbols are used to construct data flow diagrams. They are symbols that represent data source, data flows, and data transformations and data storage. The points at which data are transformed are represented by enclosed figures, usually circles, which are called nodes.

Data Flow Diagram Symbols:-



Steps to Construct Data Flow Diagrams

Four steps are commonly used to construct a DFD

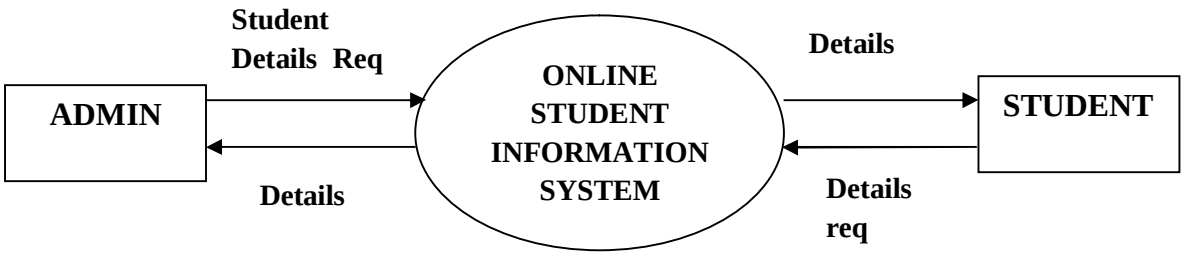
- Process should be named and numbered for easy reference.Each name should be representative of the process.
- The direction of flow is from top to bottom and from left to right.
- When a process is exploded into lower level details they are numbered.
- The names of data stores, sources and destinations are written in capital letters.

Rules for constructing a Data Flow Diagram

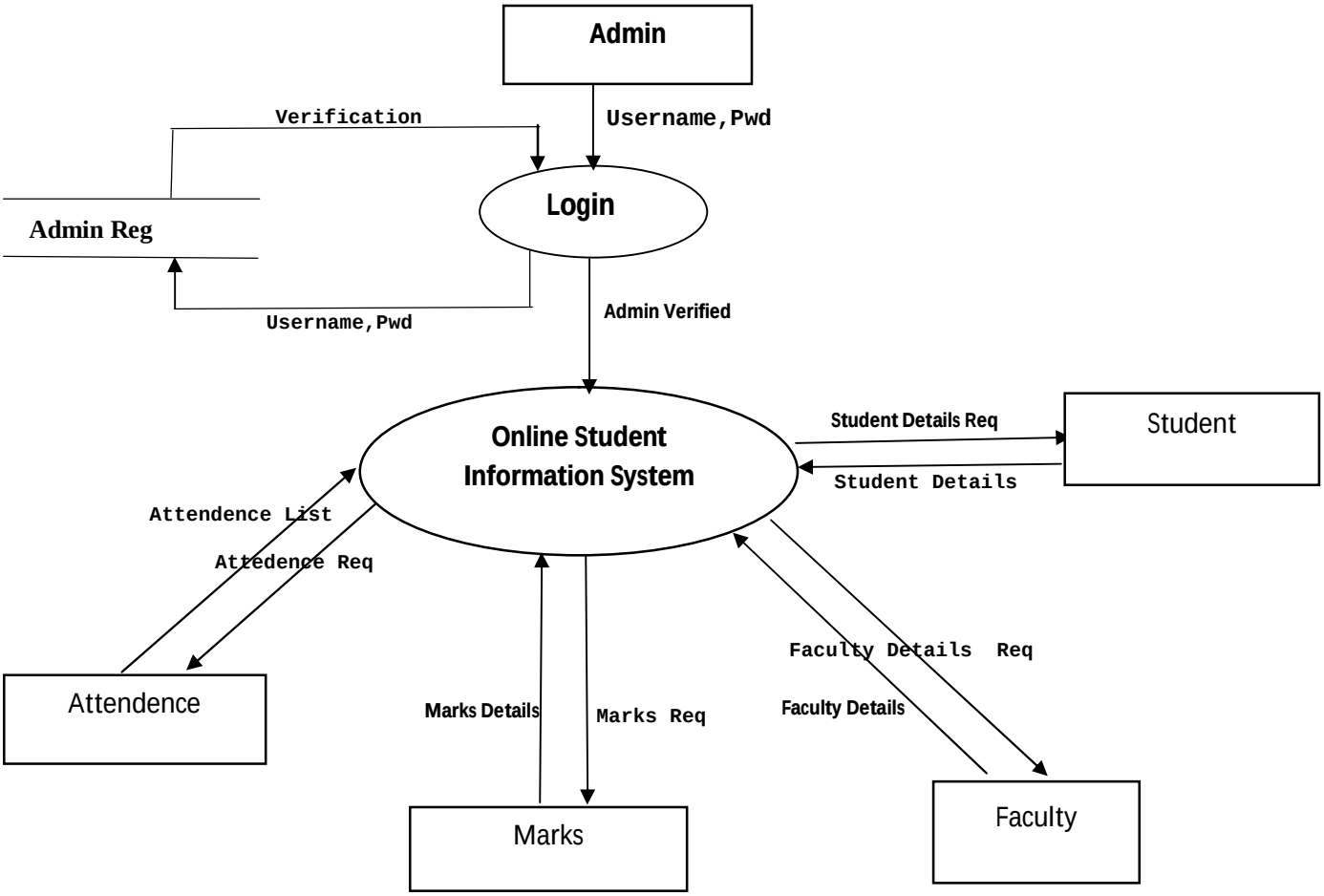
- Arrows should not cross each other.
- Squares,Circles and files must bear names.
- Decomposed data flow squares and circles can have same names.
- Choose meaningful names for dataflow.

Draw all data flows around the outside of the diagram.

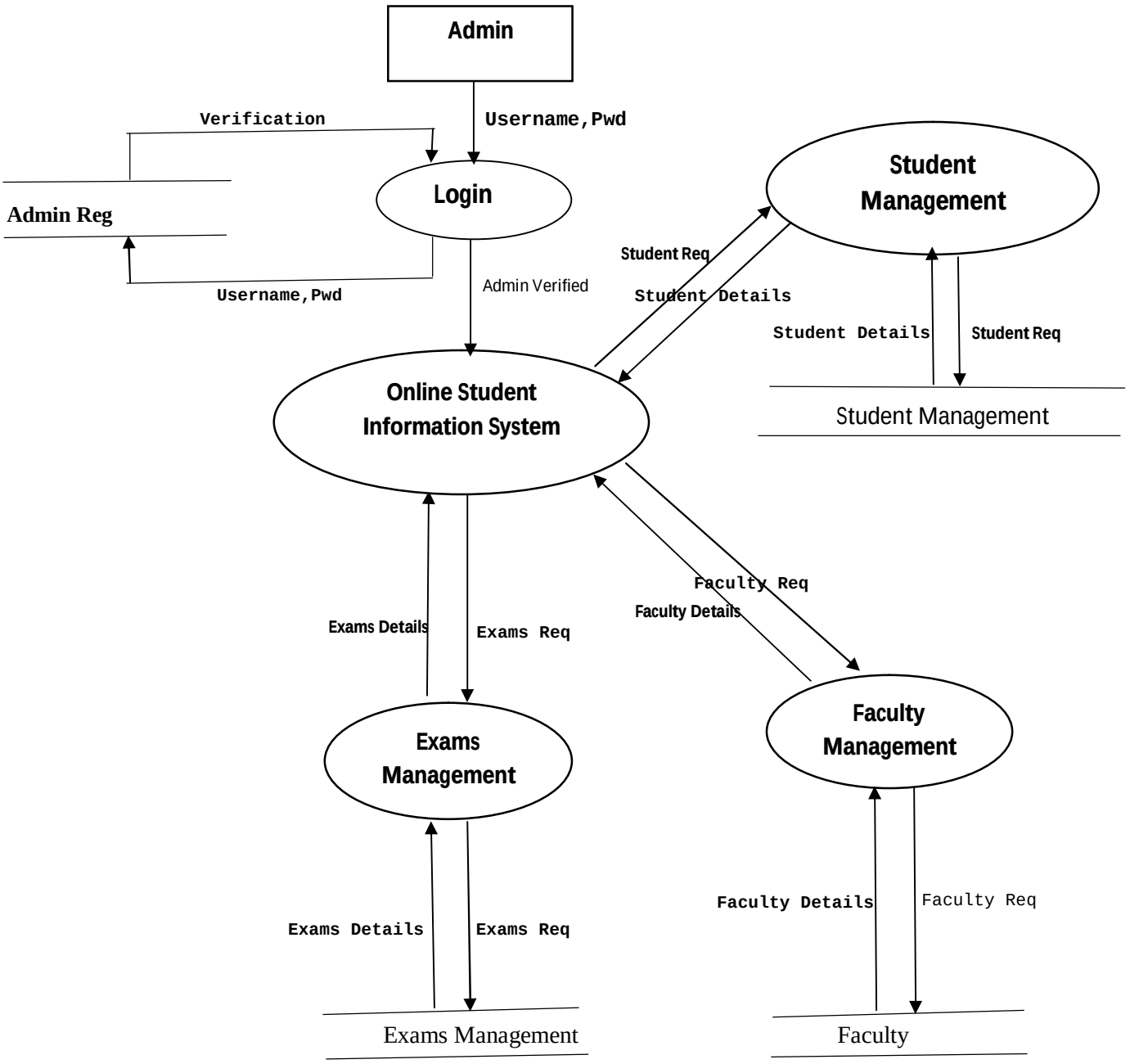
Context-Level DFD:-



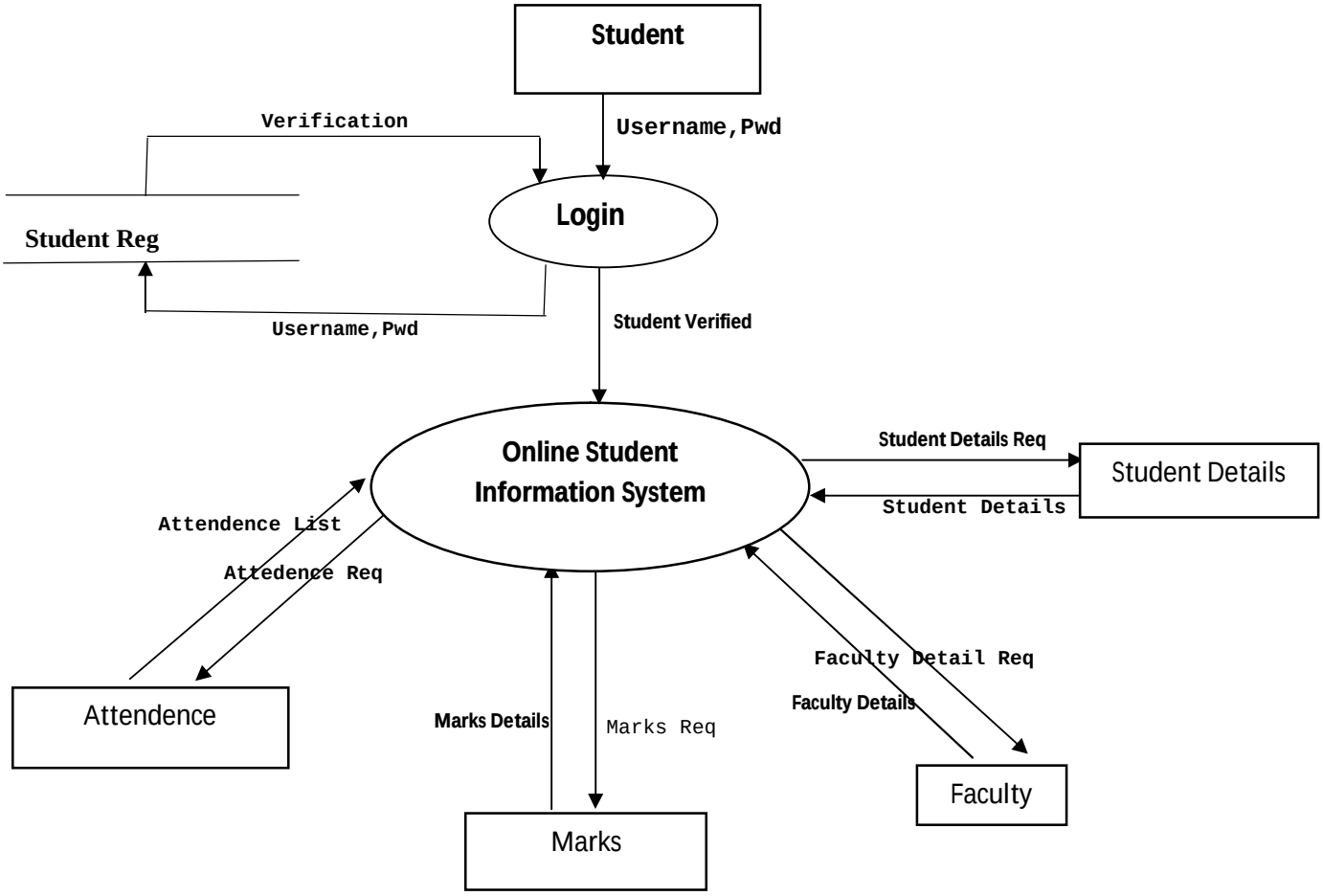
First-Level DFD FOR ADMIN:-



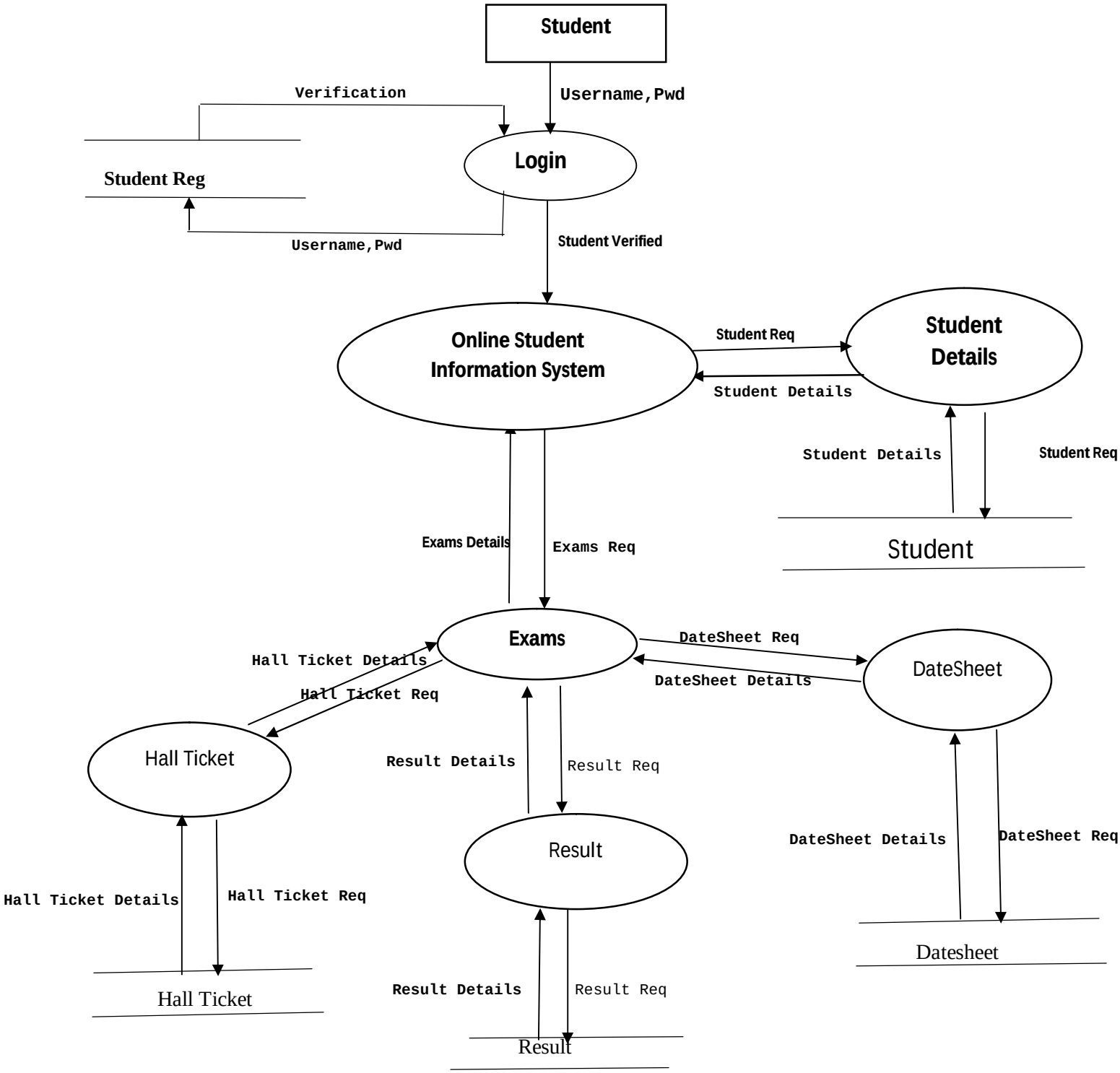
Second-Level DFD FOR ADMIN:-



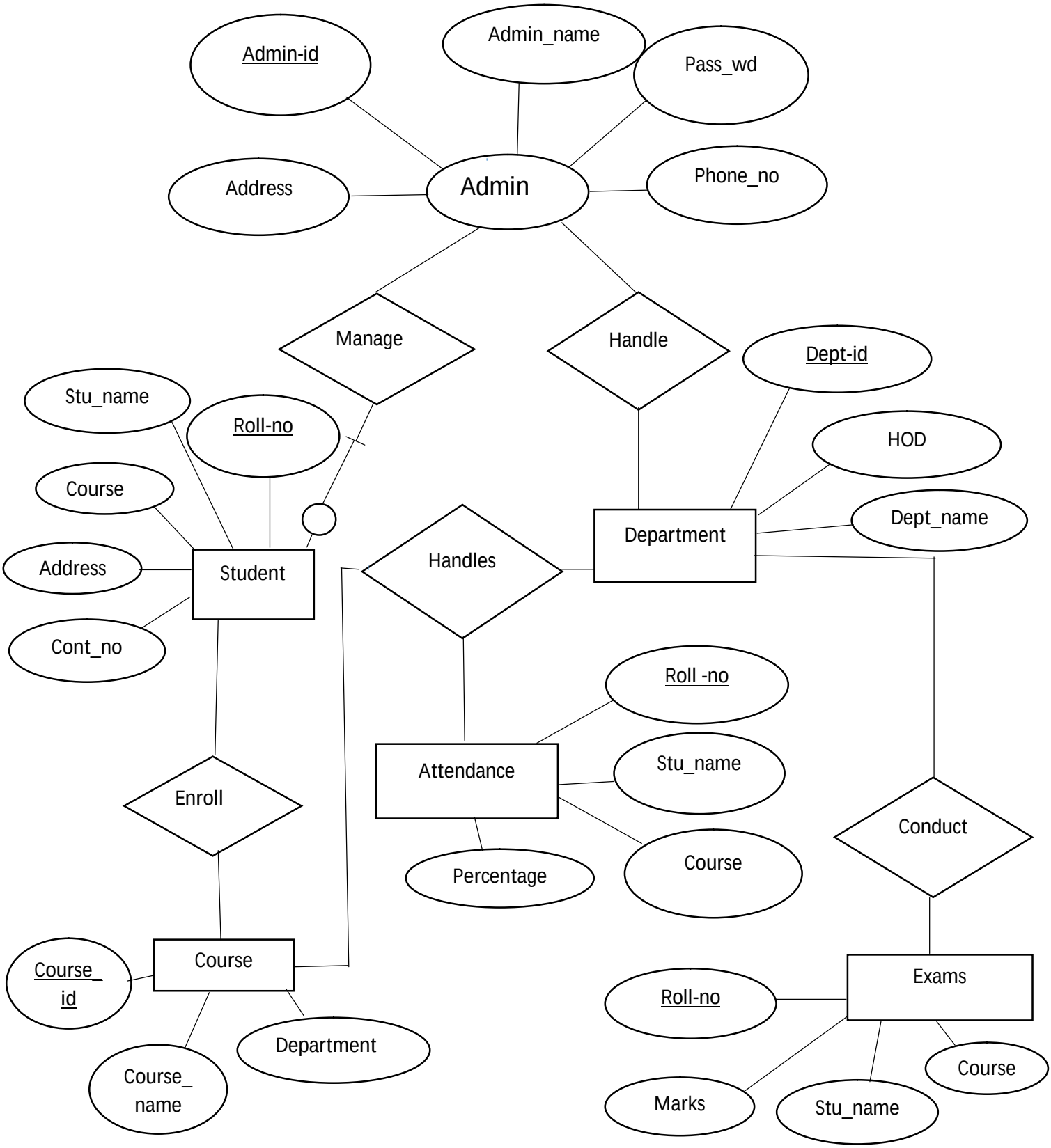
First-Level DFD FOR STUDENT:-



Second-Level DFD FOR STUDENT:-



ER DIAGRAM


Admin-id
Admin_name
Pass_wd
Address
Admin
Phone_no
Manage
Handle
Dept-id
Stu_name
Roll-no
HOD
Course
Dept_name
Department
Address
Student
Handles
Cont_no
Roll -no
Attendance
Stu_name
Enroll
Conduct
Course
Percentage
Course_
id
Course
Exams
Roll-no
Department
Course_
name
Course
Marks
Stu_name

DATABASE DESIGN

1. Administrator Table

Field	Data type (size)	Constrains	Description
Admin_id	Varchar(20)	Primary Key	Store Admin ID
Pass_wd	Varchar(20)	Not null	Store Password
Admin_name	Varchar(30)	Not Null	Store Admin Name
Address	Varchar(40)	Not Null	Store Address
Phone_No	Integer(20)	Null	Store Phone Number

2. Student Table

Field	Data type (size)	Constrains	Description
Stu_name	Varchar(20)	Not Null	Store stu Name
Address	Varchar(30)	Not Null	Store Address
Cont_no	Varchar(20)	Not Null	Store Contect details
Roll_no	Varchar(10)	Primary Key	Store Roll no
Course	Varchar(20)	Not Null	Store Course Details

3. Department Table

Field	Data type (size)	Constrains	Description
Dept_id	Integer(20)	Primary Key	Store ID Number
Dept_name	Varchar(30)	Not Null	Store Dept Name
HOD	Varchar(20)	Not Null	Store HOD Name

4. Course Table

Field	Data type (size)	Constrains	Description
Course_id	Varchar(20)	Primary Key	Store ID Number
Course_name	Varchar(30)	Not Null	Store Course Name
Department	Varchar(30)	Not Null	Store Department

5. Exam Table

Field	Data type (size)	Constrains	Description
Stu_name	Varchar(30)	Not Null	Store Student Name
Roll_no	Integer(10)	Primary Key	Store Roll Number
Marks	Varchar(20)	Not Null	Store Marks
Course	Varchar(30)	Not Null	Store Course Details

6. Attendance Table

Field	Data type (size)	Constrains	Description
Roll_no	Integer(10)	Primary Key	Store Roll Number
Stu_name	Varchar(30)	Not Null	Store Student Name
Course	Varchar(30)	Not Null	Store Course Details
Percentage	Varchar(20)	Not Null	Store Attendance Percentage

MODULES

The system has various modules:-

1. Admin
2. Student

1.Admin:- The Admin will Perform Various Function:

- Add Student details
- Add Department
- Add Course
- Manage Attendance
- Manage Exam

2.Student:-The Student will Perform Various Function:

- View Student Details
- View Marks
- View Result
- View Exam
- View Attendance

TESTING

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and code generation.

Once source code has been generated, software must be tested to uncover as many errors as possible before delivery to the customer. Our goal is to design a series of test cases that have a high likelihood of finding errors. That's where software testing techniques come into the picture. These techniques provide systematic guidance for designing tests that exercise the internal logic of software components and exercise the input and output domains of the program to uncover errors in program function, behavior and performance.

The various types of testing system used are:

- Unit Testing
- Integration Testing
- Validation Testing
- User Acceptance Testing
- System Testing

REQUIRMENT OF H/W & S/W

HARDWARE REQUIREMENT-

1. Core 2 Duo or Above
2. 512 MB RAM
3. 15 GB Hard Disk
4. 1.33 MHz speed
5. 50 MB(for package itself)
6. Dot Matrix/HP Laser/HP Inkjet Printer
7. Optical Mouse
8. 15'inch Color Monitor

Software Requirements:-

1. WIN XP/ 7 / Vista Operating System
2. JDK 1.6 or above
3. Tomcat Server
4. NetBeans IDE
5. **FRONT END:-JSP, HTML, CSS, JAVASCRIPT**

   BACK END:-MY SQL

FUTURE SCOPE & ENHANCEMENT OF PROJECT

It may help collecting perfect management in details. In a very short time, the collection will be obvious, simple and sensible. It will help a person to know the management of passed year perfectly and vividly. It also helps in current all works relative to College. It will be also reduced the cost of collecting the management & collection procedure will go on smoothly.

The present project has been developed to meet the aspirations indicated in the modern age. An attempt has been made through this project to do all work ease & fast. It provide current add, Update, MoveNext, MovePrevious, MoveLast, Find & Delete all facilities to accomplish the desired objectives. The facility Include in this project and the suggested activities have been organized to impart knowledge & develop skill & attitude in the College official works.

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