Software Requirement Specification(SRS) for Student Management System.

1. Introduction

1.1 Purpose:

This document is meant to delineate the features of online student management portal, so as to serve as a guide to the developers on one hand and software validation document for the prospective client on the other.

It is a system design to manage student information for management purpose. This will help the management section to pursuit the student which will help them to enroll in the student in different courses.

1.2 Scope:

This will help the management section to guide and help student to enrol into different courses.

1.3 Definition

SRS- Software Requirement Specification

GUI- Graphical User Interface

1.4 Overview:

Portal is a web system that provides the function and features to authenticate and identify the users and provide then with easy, intuitive, personalized and user-customizable web-interface for facilitating access to information and services that are of primary relevance and interests to the users. Student management Portal is nothing but a portal which thinks students as the main target & collect all the information of the students to provides it to admin. This portal also provide so many useful services to students at a single place & through a single interface but in customized form.

2.Overall Description: This student management system helps the admin to collect student information and use it to enroll students into different courses. Hear we can upload the broucher of the courses which admin offers. The system also store the data of payment history of students and also the future payment dates. Students with the help of portal can enrol into various courses. This portal also provide students a facility to ask doubt directly to admin.

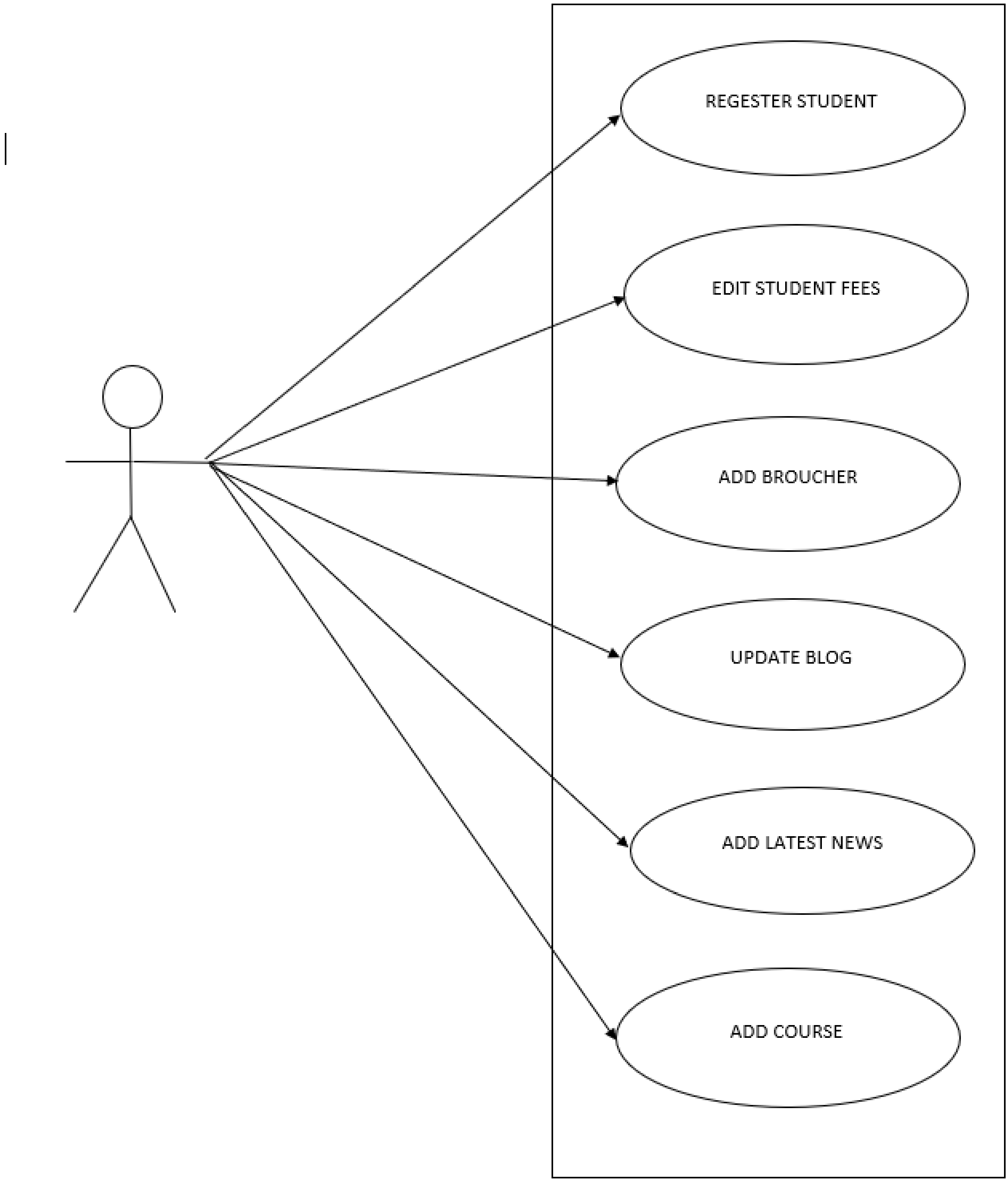
2.1 Product Perspective:

This product aimed toward a person who don’t want to visit the center as he might don’t get time for that or might not interested in visiting there and dealing with lot of formalities.

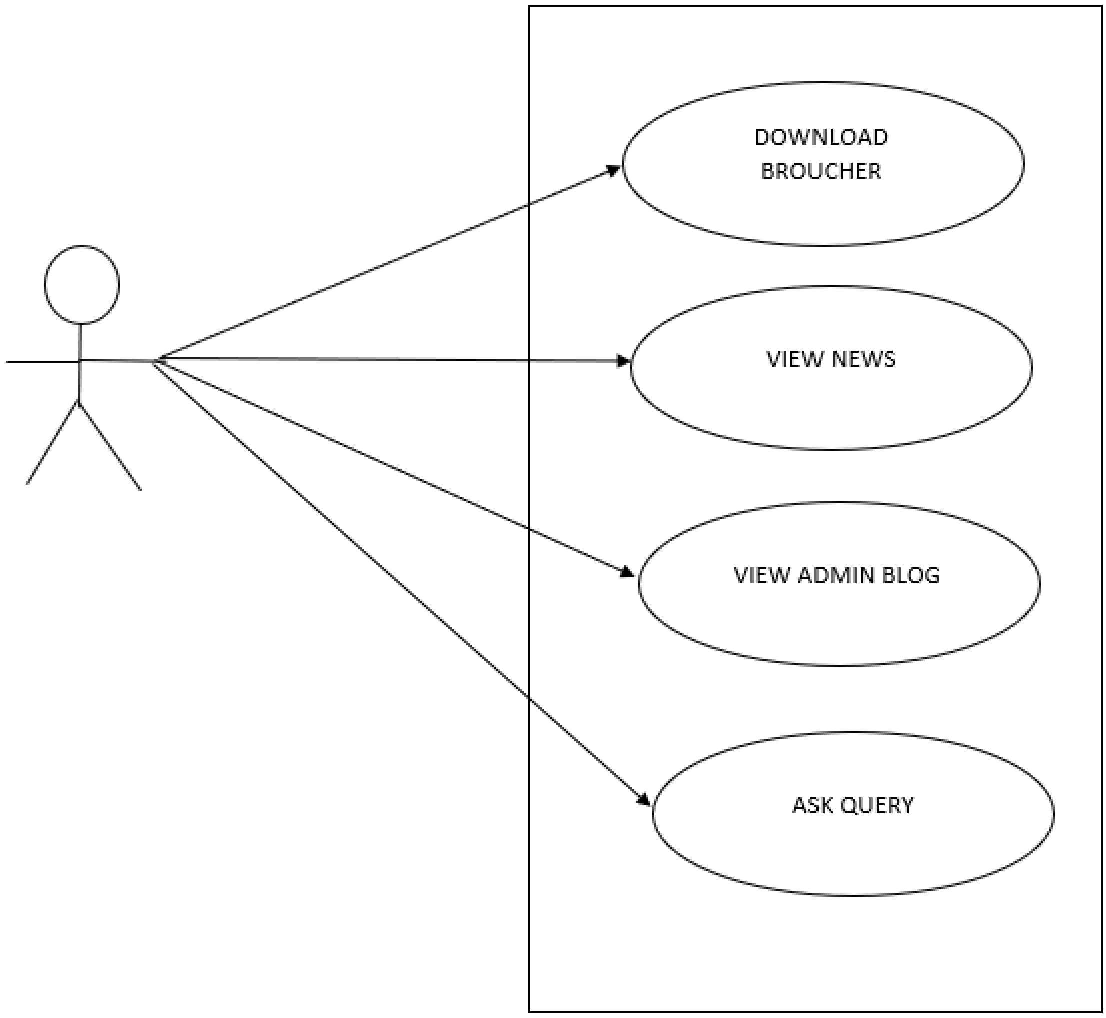
2.2 Product Functions:

Use Case Diagrams : A Use case is a description of set of sequence of actions. Graphically it is rendered as an ellipse with solid line including only its name. Use case diagram is a behavioral diagram that shows a set of use cases and actors and their relationship. It is an association between the use cases and actors. An actor represents a real-world object. Primary Actor - Sender, Secondary- Actor Receiver.

Use case diagram for admin



Student user case:



2.3 User Characeristics:

User should be familiar with the terms like login,register etc.

2.4 Principle Actors:

2 Principle Actors are Student and Administrator.

3. Specific Requirements:

3.1 FUNCTIONAL SPECIFICATION

User Specification

Admin:

Admin can add a student, manage courses offered and also view feedback and doubt.

Student:

Student can view information of course, read news, read blogs and can ask doubts to admin directly.

MODULE SPECIFICATION

Students:

- **Download broucher:**

  Hear student who have been admitted into course can download the broucher of new courses.

- **View news:**

  Hear a student can see the latest news updated by admin.

- **View blogs:**
  Hear a student can see the latest updated blog by admin.

- **Ask doubt:**
  Hear student can ask any doubt related to admission or any other query.

Admin

- **Enquiry:**
  Admin can collect the information of students who comes for enquiry so that is future he can track it.

- **Admission:**

Hear the admission process is perform all the information of student is collected and information about payment is also stored.

- **Installment:**
  Hear the admin collect the information about courses payment done by student and when they are going to give next instalment.

- **Upload broucher:**
  Admin can add the new broucher or edit the old one and upload it hear.

- **Add course:**
  Hear the admin can add or delete any subject and its respective fees.

- **Address doubt:**
  Hear the admin can see all the doubt student wants to ask him and he can delete these quries.

- **Update news:**
  Admin can update all the new information need by students hear.

3.2 Non-Functional Requirements:

Following Non-Functional Requirements will be there in the

insurance to the internet:

(i) Secure access to consumer’s confidential data.

(ii) 24X7 availability.

(iii) Better component design to get better performance at peak time.

(iv) Flexible service based architecture will be highly desirable for future extension.Non-Functional Requirements define system properties and constraints.

Various other Non-Functional Requirements are:

- Security
- Reliability
- Maintainability
- Portability
- Extensibility
- Reusability
- Compatibility
- Resource Utilization

3.3 Performance Requirements:

In order to maintain an acceptable speed at maximum number of uploads allowed from a particular customer as any number of users can access to the system at any time. Also the connections to the servers will be based on the attributes of the user like his location and server will be working 24X7 times.

3.4 Technical Issues:

This system will work on client-server architecture. It will require an internet server and which will be able to run PHP application. The system should support some commonly used browser such as IE,mozzila firefox,chrome etc.

HARDWARE REQUIREMENT

Hardware requirements for insurance on internet

will be same for both parties which are as follows:

RAM	2 GB
Hard disk	320 GB
Processor	Dual Core

Software Requirements

Student side:

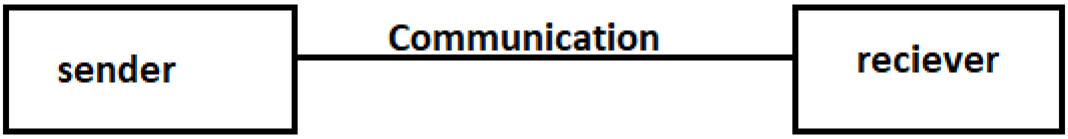
Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

Server side:

Web Server	TOMCAT
Server side Language	ANGULAR
Database Server	MYSQL
Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

Communication Interfaces:

The two parties should be connected by LAN or WAN for the communication purpose.



System Flow Chart

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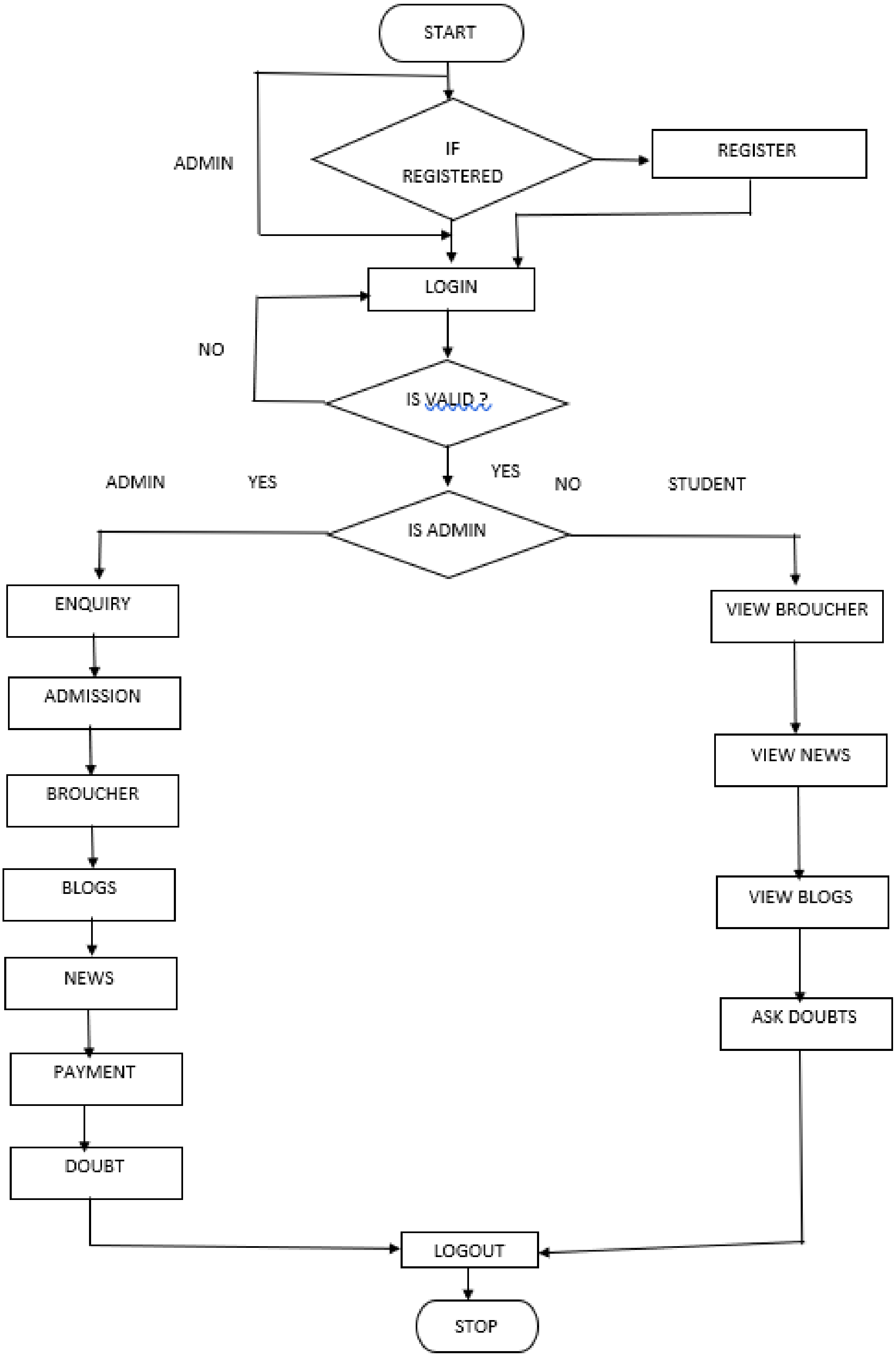
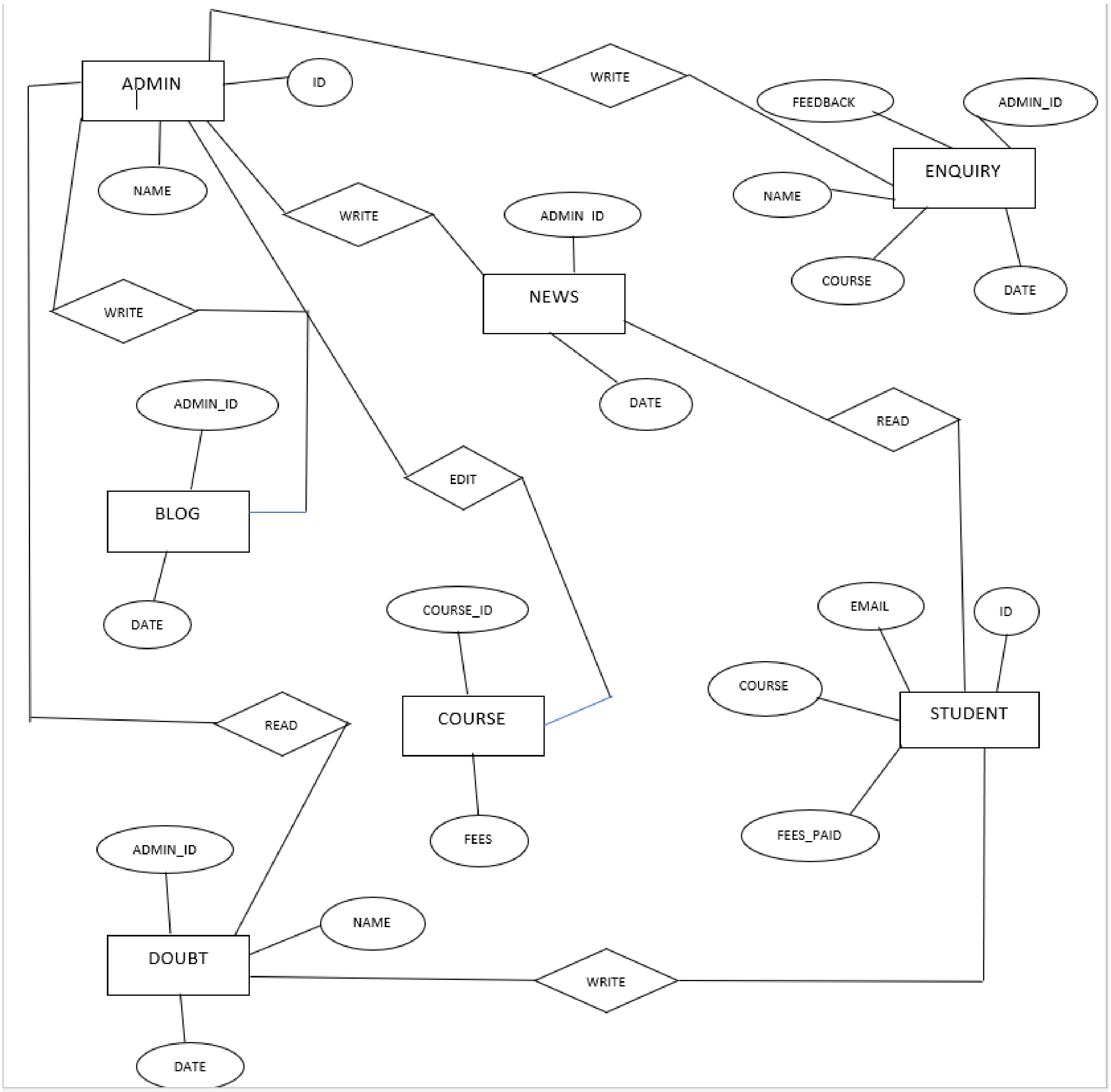


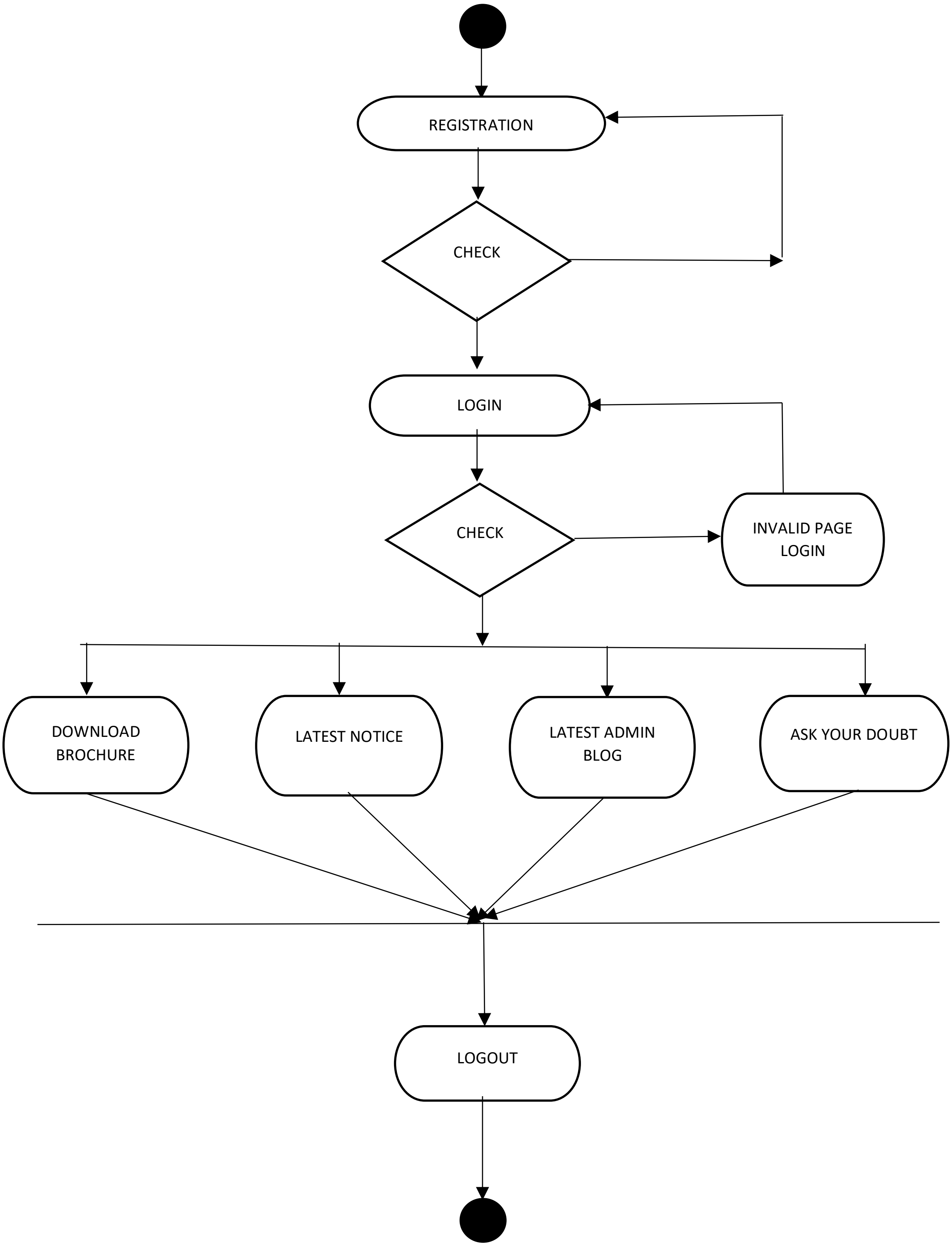
ER DIAGRAM

The Entity-Relationship (ER) model was originally proposed by Peter in 1976 [Chen76] as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represent data objects. Since Chen wrote his paper the model has been extended and today it is commonly used for database design for the database designer, the utility of the ER model is:

- It maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables.
- It is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.
- In addition, the model can be used as a design plan by the database developer to implement a data model in specific database management software.

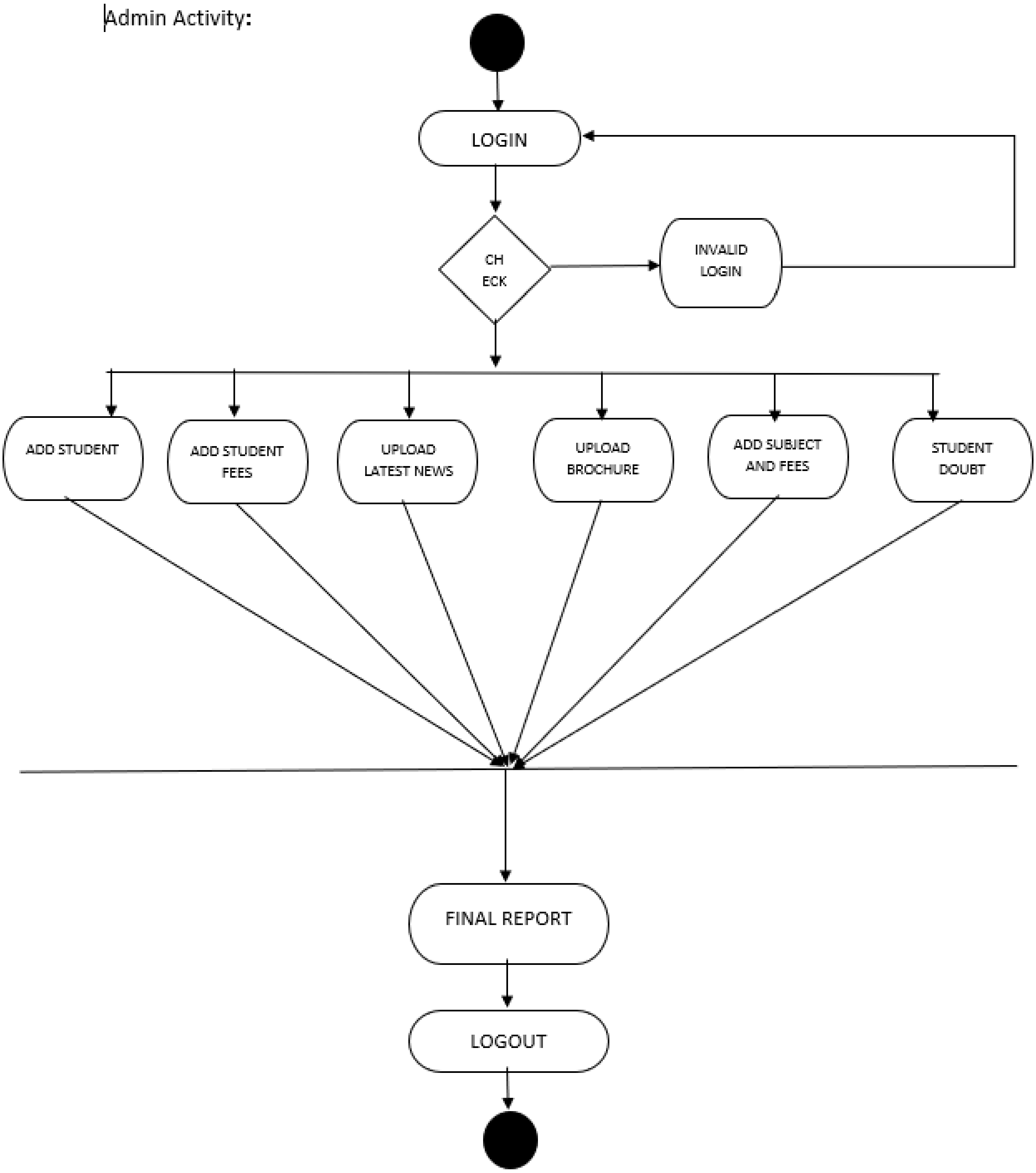

ADMIN
ID
NAME
WRITE
FEEDBACK
ADMIN_ID
ENQUIRY
NAME
COURSE
DATE
WRITE
ADMIN_ID
NEWS
DATE
WRITE
ADMIN_ID
BLOG
DATE
READ
EDIT
COURSE_ID
COURSE
FEES
EMAIL
ID
COURSE
STUDENT
FEES_PAID
READ
ADMIN_ID
DOUBT
NAME
WRITE
DATE

Student Activity



Activity Diagram for admin

Admin Activity:



DATABASE DESIGN

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system.

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redun dancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MS Access database has been chosen for developing the relevant databases.

STUDENT TABLE:

Table Name	Student
Description	This table is store information about Student
Primary Key	id
Foreign Key	-

FIELD	**TYPE**	**NULL**	**KEY**	**DEFAULT**	**EXTRA**
ID (PRI)	INT	NO		NULL	
FIRSTNAME	VARCHAR(50)	YES		NULL	
MIDDLENAME	VARCHAR(50)	YES		NULL	
LASTNAME	VARCHAR(50)	YES		NULL	
EMAIL_id	VARCHAR(50)	YES		NULL	
MOBILE_NO	BIGINT	YES		NULL	
SUBJECT	VARCHAR(50)	YES		NULL	
TOTAL_FEE	BIGINT	YES		NULL	
AMT_PAID	BIGINT	YES		NULL	
REM_AMOUNT	BIGINT	YES		NULL	
ADM_DATE	VARCHAR(50)	YES		NULL	
NEXT_INTDATE	VARCHAR(50)	YES		NULL	
USERNAME	VARCHAR(50)	YES		NULL	
PASSWORD	VARCHAR(50)	YES		NULL	
FULLNAME	VARCHAR(50)	YES		NULL	

ENQUIRY:

Table Name	ENOUIRY
Description	This table is provide the information about Students came for enquiry of courses.
Primary Key	Id
Foreign Key	-

FIELD	**TYPE**	**NULL**	**KEY**	**DEFAULT**	**EXTRA**
ID (PRI)	INT	NO		NULL	
FULLNAME	VARCHAR(100)	YES		NULL	
MOBILE	BIGINT	YES		NULL	
EMAIL	VARCHAR(100)	YES		NULL	
SUBJECT	VARCHAR(100)	YES		NULL	
FEEDBACK	VARCHAR(100)	YES		NULL	

BLOG:

Table Name	blog
Description	This table is store blogs written by the admin
Primary Key	id
Foreign Key	-

FIELD	**TYPE**	**NULL**	**KEY**	**DEFAULT**	**EXTRA**
ID (PRI)	INT	NO		NULL	
BLOG	VARCHAR(MAX)	YES		NULL	

LOGIN:

Table Name	login
Description	This table is store information of student and admin login.
Primary Key	id
Foreign Key	-

FIELD	**TYPE**	**NULL**	**KEY**	**DEFAULT**	**EXTRA**
ID (PRI)	INT	NO		NULL	
USERNAME	VARCHAR(255)	YES		NULL	
PASSWORD	VARCHAR(255)	YES		NULL	

DOUBT:

Table Name	doubt
Description	This table is store information of student doubt.
Primary Key	id
Foreign Key	-

FIELD	**TYPE**	**NULL**	**KEY**	**DEFAULT**	**EXTRA**
ID (PRI)	INT	NO		NULL	
FULLNAME	VARCHAR(200)	YES		NULL	
DOUBT	VARCHAR(MAX)	YES		NULL	

SUBJECT:

Table Name	Subject
Description	This table is store information about different courses offered by institute.
Primary Key	id
Foreign Key	-

FIELD	**TYPE**	**NULL**	**KEY**	**DEFAULT**	**EXTRA**
ID (PRI)	INT	NO		NULL	
SUBJECT	VAARCHAR(255)	YES		NULL	
FEES	BIGINT	YES		NULL	

NEWS:

Table Name	Subject
Description	This table is store latest news shared by the admin for student.
Primary Key	id
Foreign Key	-

FIELD	**TYPE**	**NULL**	**KEY**	**DEFAULT**	**EXTRA**
ID (PRI)	INT	NO		NULL	
NEWS	VARCHAR(255)	YES		NULL	