

Worksheet 1.2

Student Name: Vivek Kumar

Branch: BE-CSE (LEET)

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Subject Name: SE Lab

UID: 21BCS8129

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AIM: -Consider software for academic activities of a university. The project will cover activities like managing of students as well as faculty. Design a SRS document for the project.

1. Introduction

1.1 Purpose:

This section is written to provide general information about our product “College/UNIVERSITY Management System”.

The main objective of our product is to maintain information about students, employees and other activities like attendance, student marks, fee payment, and salary payment, etc. The information is stored for decision making in the future for a business process within an organization. This is a desktop application

1.2 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS :

Abbreviations

- DB
- CMS

Full Forms

- DATABASE
- College Management System.

1.3 Intended Audience:

This document is to be read by the development team, the project managers, marketing staff, testers, and documentation writers. The software engineer/Developer and project managers need to become intimately familiar with the SRS. Others involved need to review the document.

Testers need an understanding of the system features to develop meaningful test cases and give useful feedback to the developers. The developers need to know the requirements of the software product they need to build.

This document is for general discussions on the implementation decisions regarding the College Management System. The user of the product should have the concepts of RDMS, SQL, interfaces, and classes.

1.4 Project Scope:

As Colleges are growing day by day more and more, and also increasing the complexity of storing information of students and related to the college system, they face many related issues: attendance and fee of students, salary details of employees, etc

This project is based on the educational institute system where this application gives maximum services in a single software product that is used by teacher and system administration. This project is based on a desktop application that is sharing information on different departments in a college.

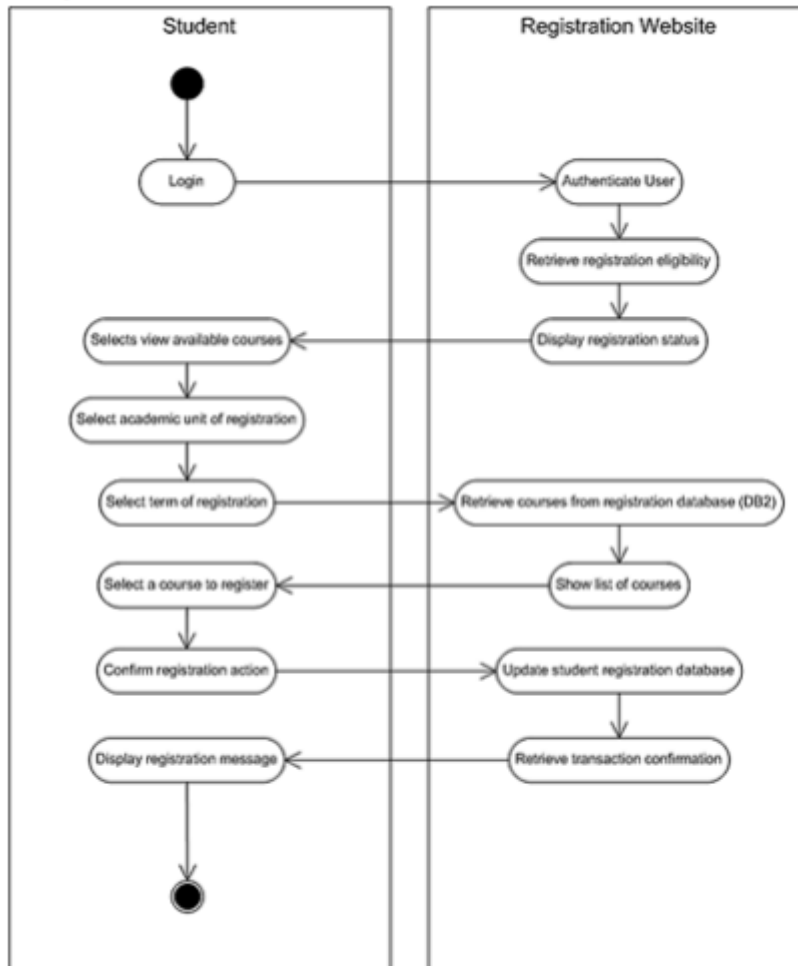
2. OVERALL DESCRIPTION

2.1 Product Perspective

The main modules which are focused on this project:

- Student management
- Employee management
- Student Fee management
- Employee salary payment
- User registration
- Internal Marks of students
- Attendance of students
- Reports of all modules (Crystal Reports)

2.2 Product Features:



2.3 Operating Environment:

The CMS is expected to be deployed in a real environment to manage the DBMS inside the college. The centralized database is used to store the information. The user only within the college (members of college staff) can use this management system. Users outside from the college cannot access the management system. This application is developed for windows operating system that can be run on Windows XP and above.

The database is used in different departments within a branch of the college. The database used to store the information is the centralized database. The software we have developed will be installed on different computer systems within a college and software will be connected to a centralized database through LAN within a college and then the user can interact with the system and can store the data and other users can get access the stored through a centralized database.

2.4 Design And Implementation Constraints

During the implementation of the product, different challenges are faced. Choosing the interface for the management system was a paramount issue. Connecting the database with the application was a major problem.

For connecting the database we had to create our account in ORACLE and then we had to download the driver(software). The connection of the database that is created in ORACLE with C# is not very simple as like SQL. So the installation of ORACLE driver(software) is necessary to create a connection between ORACLE and C#. But after installing the required driver it creates a problem in installing and connecting with a server in the oracle server, so we decided to leave the oracle and then we choose the SQL server to create the database.

2.5 Assumption Dependencies:

- The login Id and password must be created by system administrator and communicated to the concerned user confidentially to avoid unauthorized access to the system.
- It is assumed that a student registering for the subsequent semester has been promoted to that semester by the university as per rules and has paid desired university fee.
- Registration process will be open only for specific duration.

3. SYSTEM FEATURES

3.1 Database – Storage:

Proposed Database is intended to store, retrieve, update, and manipulate information related to university which include

- ✓ Profile of both users
- ✓ Staff information
- ✓ Student details
- ✓ My account
- ✓ Online payment
- ✓ View attendance/marks/uploading of marks and assignments

3.2 Stimulate/Response Sequences

Responses for Administrator: The administrator can Login and Logout. When the Administrator Logs into the University management system. The system will check for validity of login. If the Login and password are valid, the response to this action is the administrator will be able to modify, view, add, deleting and all other functions that can be performed on the database.

3.3 Functional Requirements

This section gives the list of Functional and non-functional requirements which are applicable to the University Management System.

4. EXTERNAL INTERFACES REQUIREMENT

4.1 User Interface

Describes how this product interfaces with the user.

GUI

Describes the graphical user interface if present. This section should include a set of screen dumps or mockups to illustrate user interface features.

1. Description

The user interface must be customizable by the administrator

2. Criticality

This issue is essential to the overall system. All the modules provided with the software must fit into this graphical user interface and accomplish to the standard defined.

4.2 Hardware Interface

- window
- the Mozilla Firefox & Opera 7.0 or higher version

4.3 Software Interface

- **Database:** SQL Server.
- **Application:** ASP (Active Server Pages)

5. NON-FUNCTIONAL REQUIREMENTS

5.1 Safety Requirements

The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.

5.2 Security Requirement

We are going to develop a secured database for the university. There are different categories of users namely teaching Administrator, Staff members and students etc. Depending upon the category of user the access rights are decided. It means if the user is an administrator, then he can be able to modify the data, delete, append etc. All other users other than University Staff only have the rights to retrieve the information about database.

5.3 Soft Quality Attributes

The Quality of the database is maintained in such a way so that it can be very user friendly to all the users of the database.

5.4 Hardware Constraints

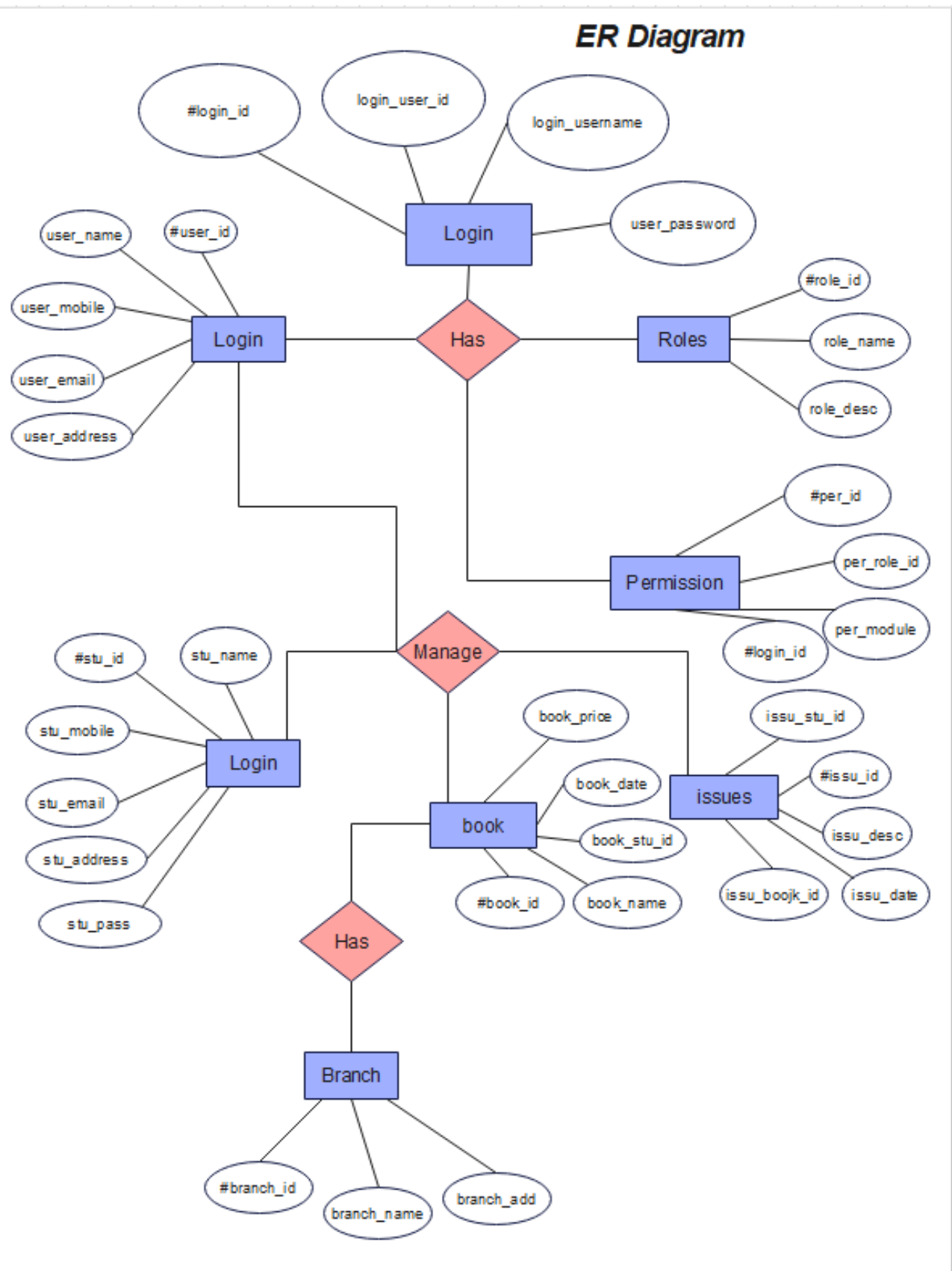
The system requires a database in order to store persistent data. The database should have backup capabilities.

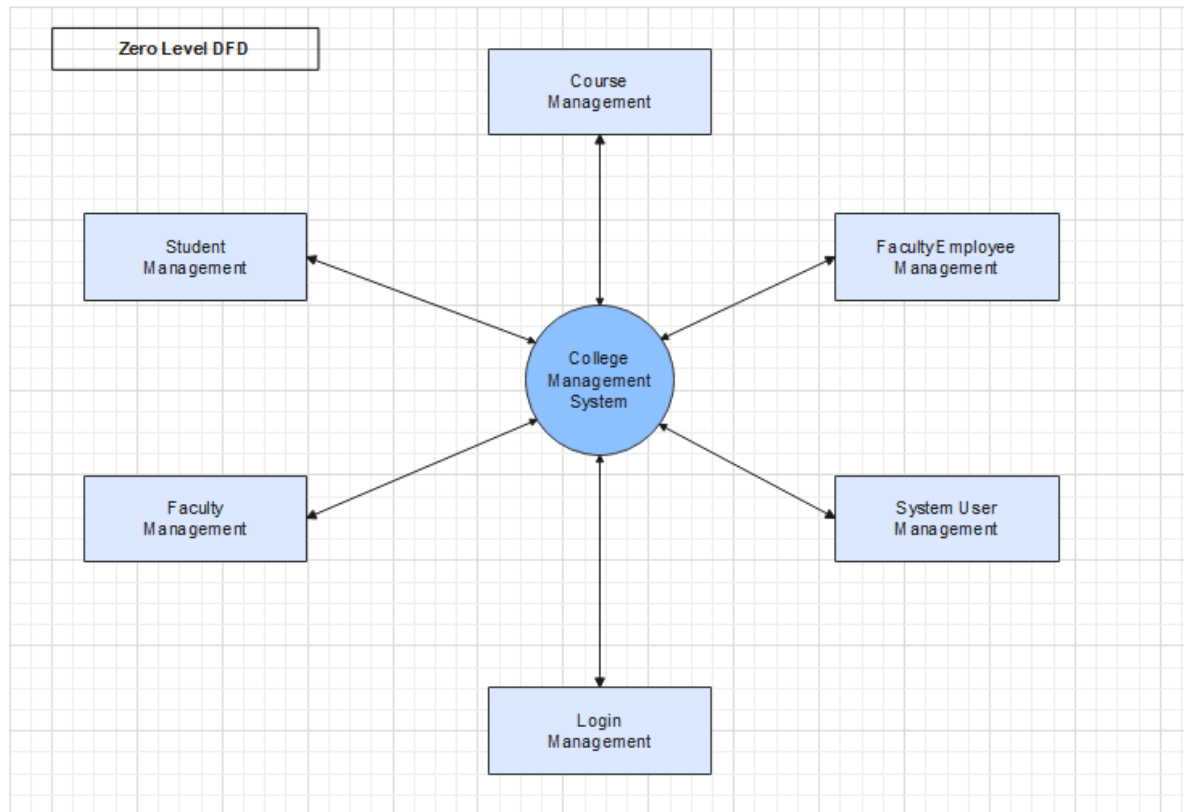
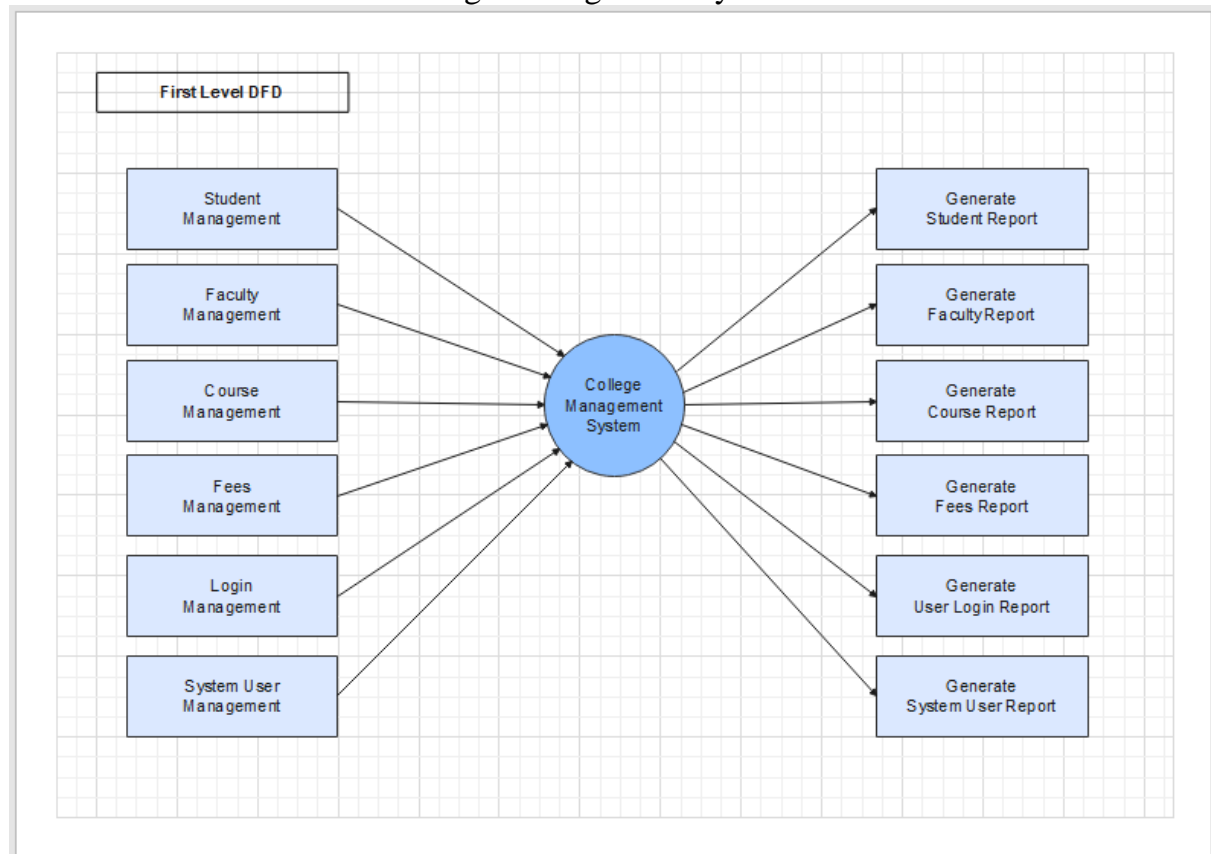
5.5 Software Constraints

The development of the system will be constrained by the availability of required software such as web servers, database and development tools.

The availability of these tools will be governed by the Lovely Professional University

ER DIAGRAM :



DATAFLOW DIGARAM:**ZERO LEVEL DFD: - College Management System****FIRST LEVEL DFD: - College Management System**

SECOND LEVEL DFD:- Student Management System

