

NEPAL BANEPA POLYTECHNIC INSTITUTE

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Major Project Proposal On

‘College Project Management System’

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With regards

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1. Introduction

1.1 Project

A project is defined as a sequence of tasks that must be completed to attain a certain outcome. According to the Project Management Institute (PMI), the term Project refers to “any temporary endeavor with a definite beginning and end”. Depending on its complexity, it can be managed by a single person or hundreds. The project has the following characteristics:

- ✓ A clear start and end date,
- ✓ A Project has boundaries such as times, workforce, technology etc.
- ✓ A project has certain outcome.

Projects come in a wide range of shapes and sizes. A project can be big or can be small, and can involve many people or just one individual according to its size.

1.2 College Project

In most educational institutions, there are mainly two types of projects handled by students, Minor and Major. In Minor, students are supposed to make a group having a maximum of 3 members and each group should handle a project with a unique topic i.e. project title of one group should not match with another. The topic should be relatable to their faculty. After the completion of a project, students are given marks according to their progress and performance. Similarly in Major, all the processes are the same as in Minor and the only difference is that the Major carries 4 times more marks than the Minor. So the number of group members is increased as well as the students are required to work with more focus to get preferred marks.

1.3 College Project Management System

The College Project Management System is a PHP/MySQL project that will help students to manage the records and status of each project they handle. This system organizes the student's project records with each part of the development phase, such as the requirement analysis, design, coding, etc. The system user will be able to see the progress of each category/division in each project.

2. Problem Statement

2.1 Poor planning

Poor planning means that the schedule that the team members are supposed to follow is not set out. The members will have no clear picture of what is expected of them as they work on the projects. There will be no deadlines to meet hence creating a lazy atmosphere among the team members. This means that the project will not be completed on time.

2.2 Poor communication & team conflict

Poor communication is the root of many failed projects, so it is little surprise that communication leads to team conflict. Without a communication plan, team members quickly become confused about their work, priority tasks, and the overall purpose of the project.

3. Project Objectives

- 1) To develop a system capable of tracking a project in each and every process.
- 2) To develop a system capable of rewarding the performance metrics from begin to end of the project.

4. Scope

In colleges, project members can use the system to create tasks and assigning those tasks to someone. After students have handled the projects they surely go to the supervisor to show the progress of their project, the supervisor can use this system as an admin to assign marks according to their performance. As well as using the proposed system, keeping records of projects with project member's name, and the progress of projects become easy. Overall, the system will be helpful to manage numbers of college projects in an efficient way.

5. Literature Review

Project Management (PM) is defined as the application of knowledge, skills, tools, and techniques to project activities in order to meet needs and expectations from a project.

College project management system organizes the student's project records with each part of the development phase, such as the requirement analysis, design, coding, etc. The system user will be able to see the progress of each category/division in each project.

There are different types of project management systems are used to handle projects .They are unique in operation, depending on the kind of project one is managing. Mohamed, A (2016) explained five types of project management systems .Those are as follows: 1) A desktop management is implemented as a programmed that runs on the desktop of a particular user. Users and organizations can purchase it as a desktop package. The advantage of this type is the highly responsive and graphically-intense user interface. 2) A web-based project management system is implemented as a web application to be accessed via a web browser, or an extranet. It is multi-user and can be accessed from any computer without installing the software. They are usually less responsive than desktop applications, and users cannot access project information if they are offline. 3) A personal project management system is designed for handling simple or home projects. It usually has a simple interface, and mostly overlaps with single user systems.

Our aim to provide college project management system for student to manage the records and status of each project they handle.

6. Methodology

To develop the proposed system, we will be using the ‘Iterative Enhancement Model’ where a system is developed in different iteration. Iterative process starts with a simple implementation of a subset of the software requirements and iteratively enhances the evolving versions until the full system is implemented. At each iteration, design modifications are made and new functional capabilities are added. The basic idea behind this method is to develop a system through repeated cycles (iterative) and in smaller portions at a time (incremental).

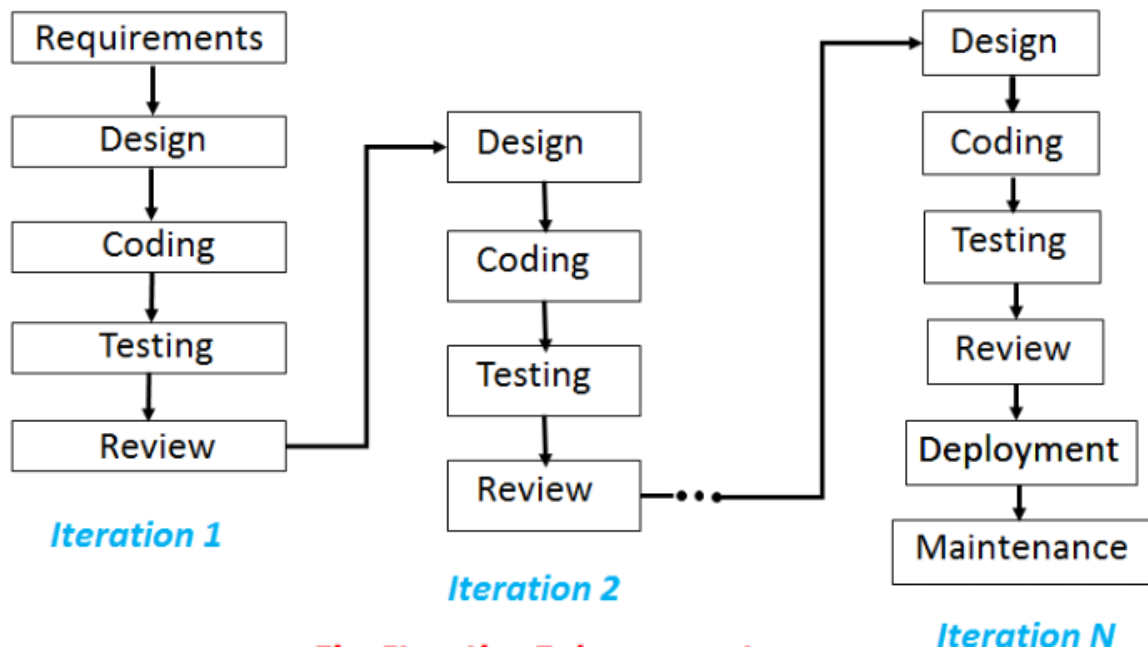


Figure 1 : Iterative Enhancement Model

In the 1st iteration, we will analyze the requirements for authentication and design it accordingly. Then we will start coding and testing. At last we will implement this iteration of authentication and authorization on our system. An easy UI for authentication and authorization will be developed in first iteration.

Then in second iteration, we will work in group management. We will develop an attractive UI for users to make groups having maximum of 4 members in each.

In third iteration, we will develop UI of task management where each group can add, modify and manage their tasks.

At last, we will develop a function where an admin can assign marks according to student's performance.

6.1 Level 0 DFD of the proposed system

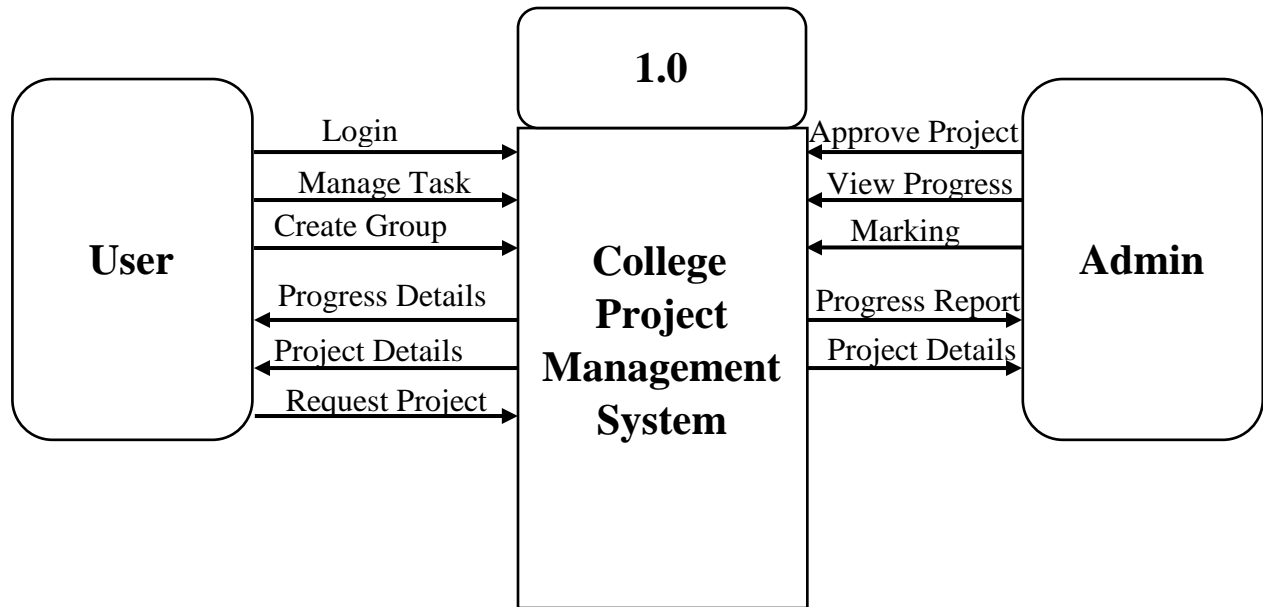


Figure 2 : Level 0 DFD of proposed system

6.2 Level 1 DFD

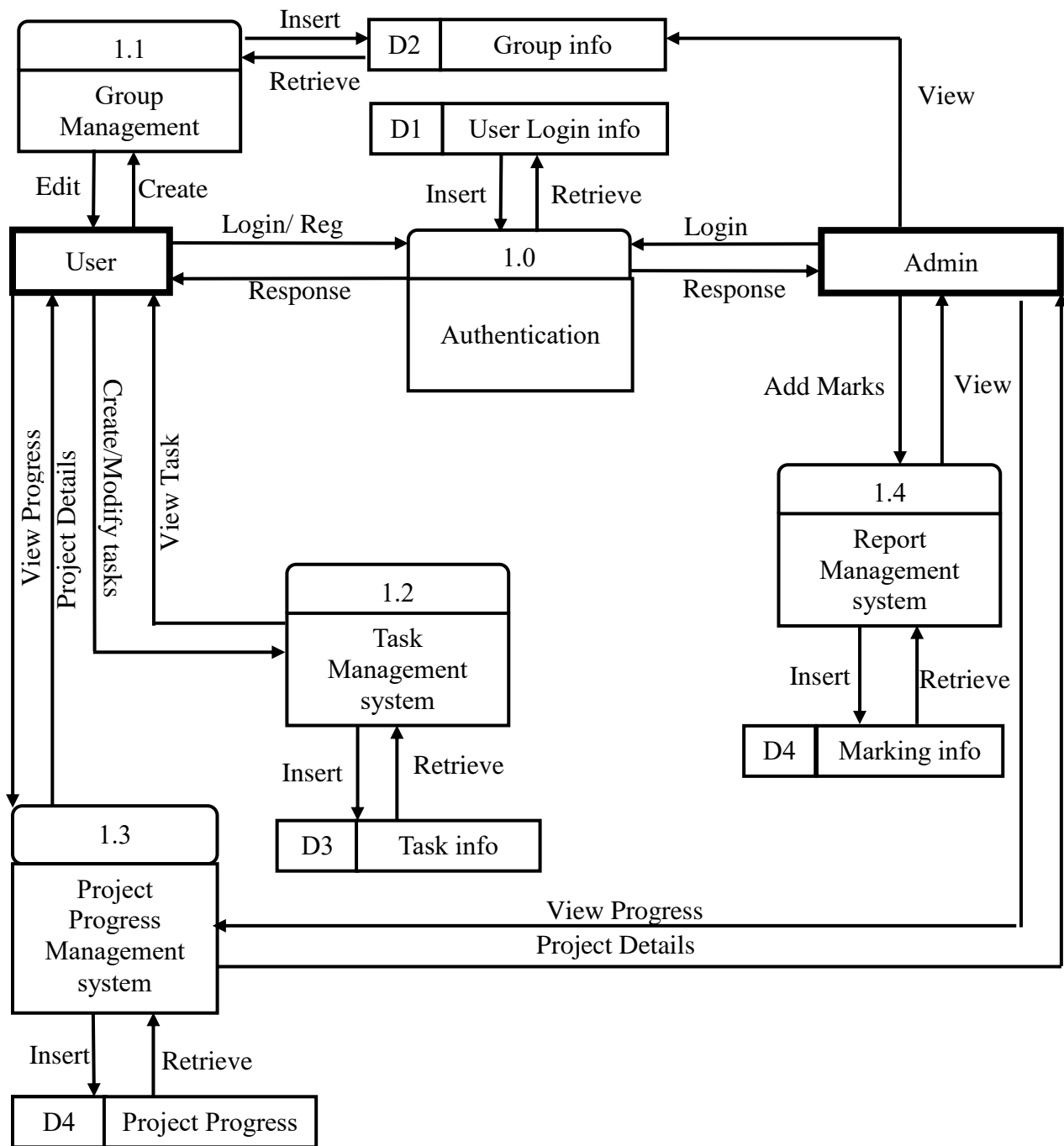


Figure 3: Level 1 DFD of proposed system CPMS

6.3 Use Case Diagram

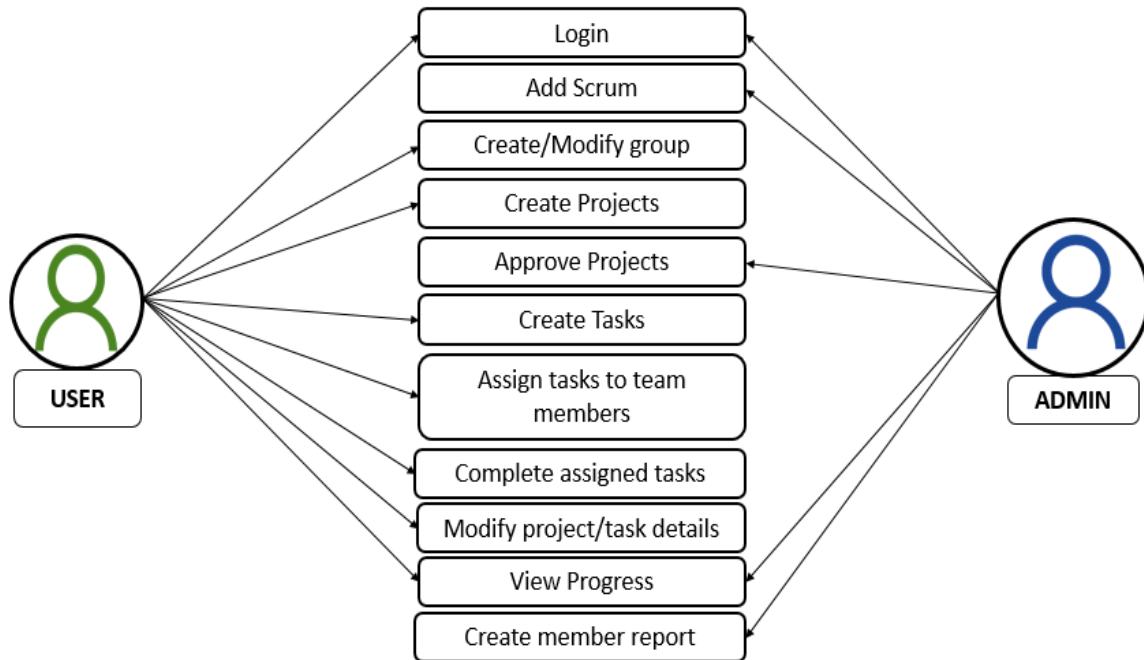


Figure 4: Use Case Diagram of College Project Management System

6.4 Software and Hardware Requirement

	Windows Requirements	Mac Requirements	Linux Requirements
Operating System	Windows7 or Latter	MacOsSierra10.12 or latter	64bit, Ubuntu14.04+, Debin8+, OpenSUSE13.3+, Or Fedoralinux24+
Processor	IntenPentium4 or latter	Intel	IntenPentium4 or latter
Memory	2GBminimum,4GBrecommended		
Internet Connection	Require		

6.4.1 Frontend:

- HTML
- CSS
- JavaScript

6.4.2 Backend:

- PHP

6.4.3 Database

- MySQL

6.4.4 Code Editor

- Visual Studio Code

6.4.5 Web Browser

- Chrome Browser

7. Remaining Works

8. Gantt Chart

	Time Schedule							
Task Name	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Requirement Analysis								
Design								
Coding								
Testing								
Review								
Documentation								

Figure 5: Gantt chart

9. Reference

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