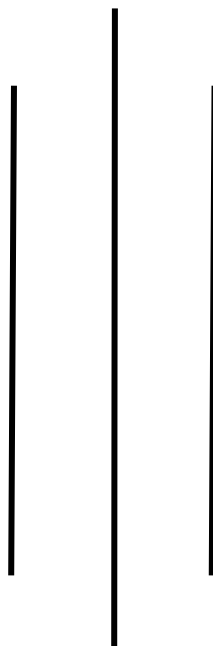


# POKHARA COLLEGE OF MANAGEMENT

NADIPUR, POKHARA



Report on

*Hamro Notes*

*Submitted By:*

Ashish Dhakal

Sundar B.R Chhetri

*Submitted To:*

ER. Hari Prasad Baral

BCIS Coordinator



**POKHARA COLLEGE OF MANAGEMENT**

**Nadipur, Pokhara**

**PROJECT PROPOSAL**

**BACHELOR OF COMPUTER INFORMATION  
SYSTEM (BCIS)**

**PROJECT TITLE:**

*Hamro Notes*

**SUBMITTED BY:**

**Ashish Dhakal**

**Sundar Bahadur Regmi Chhetri**

**SUBMITTED TO:**

**Er. Hari Prasad Baral**

**BCIS Coordinator**

Pokhara College of Management

(Affiliated to Pokhara University)

Nadipur, Kaski



## BONAFIDE CERTIFICATE

This project entitled “**Hamro Notes**”, submitted by **Ashish Dhakal and Sundar Bahadur Regmi Chhetri** in partial fulfillment of the requirement of “Bachelor’s in Computer and Information System (BCIS)” has been accepted as a bonafide record of work independently carried out by his/her in the department.

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Internal Examiner

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Internal Examiner

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External Examiner

## ACKNOWLEDGEMENT

I am thankful to all the faculty members for providing their valuable time and guidelines in elaborating views of studying the project details and getting the right vision for its implementation.

I am also thankful to our program coordinator **Er Hari Parsad Baral** and other faculty member who has a vast knowledge of DBMS, Website Design, System Analysis and design, and Programming concepts which are the building block of this project.

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## Abstract

The "**Hamro Notes**" project is a mobile educational application developed to enhance online learning experiences. Utilizing the Flutter framework for the frontend and PHP for the backend, the app ensures a seamless and user-friendly experience across both Android and iOS platforms.

The primary objective of this project is to create an interactive platform that supports comprehensive course management, efficient content delivery, and robust student assessments. The development process encompassed requirement analysis, system design, implementation, and extensive testing to guarantee high performance and usability.

Key features of the "**Hamro Notes**" application include customizable course management systems, real-time communication tools, interactive assessment modules, and secure user authentication mechanisms. The project has successfully achieved its goals by delivering a reliable and efficient educational platform tailored to the needs of both educators and learners.

In conclusion, the "**Hamro Notes**" mobile application represents a significant advancement in mobile-based education, providing essential tools and features designed to enrich the learning experience and facilitate effective education delivery.

## Table of Contents

BONAFIDE CERTIFICATE.....	3
ACKNOWLEDGEMENT.....	4
Abstract .....	5
List of Tables .....	8
List of Figures .....	8
List of Abbreviation .....	8
Database Table.....	8
CHAPTER ONE: Introduction.....	9
1.1 Introduction .....	9
1.2 Problem Statement.....	9
1.3 Objective .....	9
1.4 Scope of the Project.....	10
CHAPTER TWO LITERATURE REVIEW .....	11
2.1 Existing System vs Proposed System.....	12
2.1.1 Existing System .....	12
2.1.2 Proposed System .....	12
2.2 Budgeting .....	12
2.3 Feasibility study .....	12
CHAPTER THREE SYSTEM REQUIREMENT .....	14
3.1 System Requirement .....	14
3.2 System Architecture .....	15
3.3 Use Case .....	16
3.3 ER Diagram .....	17
3.4 Data Flow Diagram .....	18
3.5 Gantt Chart .....	19
3.5 Database Table .....	19
CHAPTER FOUR MODULES.....	20
4.1 Module .....	20

CHAPTER FIVE: RESULT AND CONCLUSION .....	21
5.1 Result.....	21
5.2 Conclusion .....	21
5.3 Screenshots.....	22
REFERENCES .....	23

**List of Tables**

**List of Figures**

**List of Abbreviation**

**Database Table**



## CHAPTER ONE: Introduction

### 1.1 Introduction

In an era where digital solutions are rapidly transforming education, the need for accessible and comprehensive learning resources has never been more critical. "**Hamro Notes**" is a mobile application designed to meet this demand by providing a centralized platform for educational notes and materials. Developed using Flutter, Hamro Notes ensures a seamless and interactive user experience on both Android and iOS devices. The app offers a vast repository of notes covering a wide range of subjects from different universities in Nepal, making it an invaluable resource for students at all academic levels, from basic classes to university courses.

### 1.2 Problem Statement

The traditional offline learning system presents numerous challenges, including limited access to quality educational resources, difficulties in managing and organizing study materials, and a lack of interactive learning tools. Students often struggle to find comprehensive notes and study guides, which can impede their academic progress. Furthermore, the static nature of offline resources means that students cannot easily update or access the latest information.

Hamro Notes addresses these issues by offering a dynamic and user-friendly mobile platform where students can easily find and access a wide range of educational materials. The app provides notes for every possible subject from various universities in Nepal, ensuring that students have access to up-to-date and comprehensive study materials. By facilitating easy access to high-quality educational resources, Hamro Notes enhances the learning experience and supports students in achieving their academic goals.

### 1.3 Objective

The objective of **Hamro Notes** is to build the user friendly interactive mobile online education platform.

## 1.4 Scope of the Project

The scope of the "**Hamro Notes**" project includes:

**Development and Deployment:** Creating a cross-platform mobile application using the Flutter framework to ensure compatibility with both Android and iOS devices.

**Content Repository:** Building a comprehensive database of notes and study materials covering a wide range of subjects from different universities in Nepal.

**User Interface and Experience:** Designing an intuitive and user-friendly interface that allows users to easily search for and access educational materials.

**Real-Time Updates:** Incorporating features that enable the real-time updating of notes and materials to ensure users have the latest information.

**Scalability and Robustness:** Developing a scalable backend system using PHP to handle extensive data and user interactions efficiently.

**Support and Documentation:** Providing comprehensive support and documentation to help users navigate and utilize the app effectively.

The "Hamro Notes" project aims to revolutionize the way students in Nepal access and utilize educational resources, making high-quality notes and study materials readily available through a convenient mobile application.

## **CHAPTER TWO LITERATURE REVIEW**

The system we present here is tailored for an educational resource management platform. This mobile application, "Hamro Notes" provides various types of facilities and services for students and educators. The features offered by this system are:

- Note Management
- User Management
- Content Delivery Management
- Real-Time Update Management
- Assessment Management
- Course Management
- Communication Tools
- Secure Authentication Management

"Hamro Notes" is a mobile application designed to help students access educational notes and materials from various universities in Nepal. It allows users to find, access, and utilize reading materials efficiently. In today's digital age, the need for intelligent, user-friendly educational tools is increasing, and "Hamro Notes" meets this demand by providing an intelligent learning environment with powerful infrastructure.

The system dynamically manages notes and educational materials through an admin panel, which enables administrators to add, manage, and update resources, ensuring students have access to the latest information. It offers an interface for both administrators and users to search and access content and incorporates real-time communication tools to enhance interaction between educators and students, making it a comprehensive solution for modern educational needs.

## **2.1 Existing System vs Proposed System**

### **2.1.1 Existing System**

- Relies on manual record-keeping methods.
- Involves maintaining physical copies of educational notes and materials, making it difficult to manage and access resources.
- Educators perform tasks such as distributing notes, managing course materials, and conducting assessments manually.
- Time-consuming and error-prone process.
- Limited communication between educators and students.

### **2.1.2 Proposed System**

- Mobile-based application for automated educational resource management.
- Centralized database for adding, managing, and updating educational notes and materials with real-time access for authorized users.
- Features for generating reports and statistics to aid in educational planning and decision-making processes.
- Enhanced data accuracy and reduced errors.
- Improved communication between educators and students through real-time communication tools.
- Scalable and flexible to accommodate the needs of educational institutions of any size.

## **2.2 Budgeting**

The estimated project cost will be Rs.30,000 and divide it into three instalments of Rs.10,000. First instalment before the start of project, Rs.10,000 after completion of the half of the project and rest of the Rs.10,000 on handling the project to the client and roughly Rs.5,000 annually of maintenance the system and additional charge depending upon the how big issue arise in the system.

## **2.3 Feasibility study**

A feasibility study for the "Hamro Notes" project was conducted to assess its viability and identify potential challenges. The key findings are as follows:

- **Technical Feasibility:** The project requires expertise in Flutter for mobile app development and PHP for backend development. The team has the necessary skills and resources to develop and maintain the platform effectively.
- **Market Feasibility:** There is a growing demand for accessible educational platforms. "Hamro Notes" aims to meet this demand by providing a comprehensive and user-friendly app for educational materials, indicating strong market potential.
- **Financial Feasibility:** The project requires investment in development and marketing, but has high revenue potential through premium features, ads, and partnerships, making it financially viable.
- **Legal Feasibility:** "Hamro Notes" must comply with regulations on educational content, data privacy, and user protection. The team has reviewed these requirements and will ensure compliance to protect user data and maintain trust.
- **Operational Feasibility:** The project needs a skilled team for content management, user support, and continuous development. The team is equipped to handle these operational tasks effectively, ensuring smooth platform operation.

In summary, the feasibility study shows that "Hamro Notes" is viable across technical, market, financial, legal, and operational dimensions, positioning it well to meet user needs and achieve its goals.

## CHAPTER THREE SYSTEM REQUIREMENT

### 3.1 System Requirement

System requirements for the "**Hamro Notes**" mobile application project:

#### **Hardware Requirements:**

- Processor: 1.5 GHz or higher (for development and testing environments)
- Memory: 4 GB RAM or higher
- Storage: 500 GB storage space (for development, testing, and backend server)

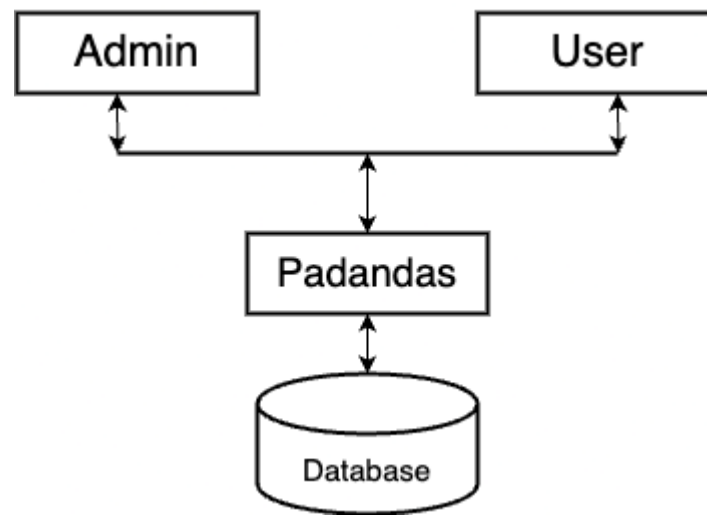
#### **Software Requirements:**

- **Development Environment:**
  - Integrated Development Environment (IDE):
  - Android Studio or Visual Studio Code
  - Flutter SDK for cross-platform mobile app development
  - Dart programming language
  - PHP for backend development
- **Backend Server:**
  - Web server (e.g., Apache) to host PHP scripts and serve API endpoints
  - Database management system: MySQL.
- **Mobile Operating Systems:**
  - Android version 5.0 (Lollipop) or higher
  - iOS version 10.0 or higher
- **Tools and Libraries:**
  - Version control system: Git
  - Dependency manager: Pub for Flutter packages
  - API testing tool: Postman
- **Devices:**
  - Smartphones and tablets running Android and iOS for testing purposes
- **Additional Requirements:**
  - Internet Connection: Stable internet connection for development, testing, and app usage

- Browser: For accessing backend admin panel and development dashboards (Google Chrome, Mozilla Firefox, or Microsoft Edge)

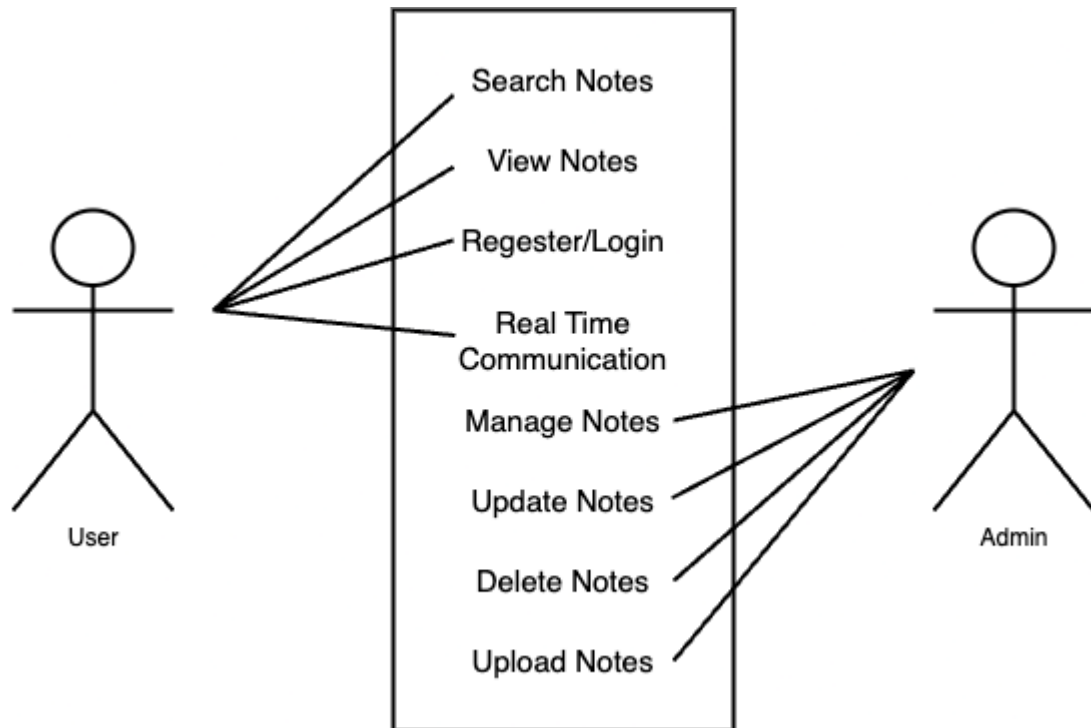
These requirements ensure that "**Hamro Notes**" operates efficiently on mobile devices, providing a smooth and responsive user experience while allowing developers to effectively build and maintain the application.

### 3.2 System Architecture



*Figure1: System Architecture*

### 3.3 Use Case



***Figure2: Use Case Diagram***



### 3.3 ER Diagram

### **3.4 Data Flow Diagram**

### 3.5 Gantt Chart

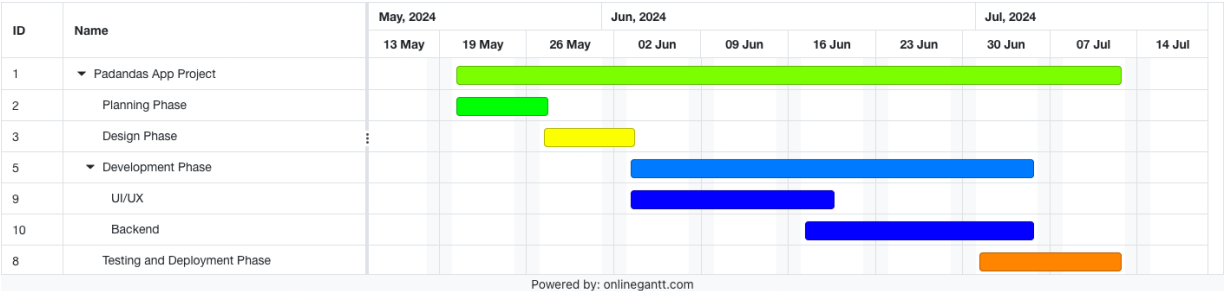


Figure: Gantt Chart

### 3.5 Database Table

## CHAPTER FOUR MODULES

### 4.1 Module

The "**Hamro Notes**" project consists of several modules that provide a comprehensive educational resource management solution:

- User Management Module: Handles user registration, login, and profile management.
- Note Management Module: Allows administrators to add, edit, or delete educational notes and manage subject categories.
- Search Module Enables: users to search for notes and educational materials across various subjects and universities.
- Download Module: Allows users to download notes for offline use.
- Upload Module: (Admin) Enables administrators to upload new notes and materials, with categorization and tagging for easy searching.
- Real-Time Communication Module: Provides tools for messaging, announcements, and discussion forums to enhance educator-student interaction.
- Report Generation Module: (Admin) Generates reports and statistics on platform usage to aid in decision-making.
- Authentication and Security Module: Ensures secure login, password management, and data encryption to protect user data and privacy.

Each module is essential for the efficient operation of the "**Hamro Notes**" platform, ensuring it meets user needs effectively.

## **CHAPTER FIVE: RESULT AND CONCLUSION**

### **5.1 Result**

The "Hamro Notes" project has yielded remarkable results, establishing a comprehensive and user-friendly mobile application for educational resource management. Through meticulous planning and execution, the project successfully implemented key modules such as user management, note management, search functionality, real-time communication tools, and robust security measures. These modules collectively ensure seamless user experiences, efficient access to educational materials, and enhanced collaboration between educators and students. Additionally, the platform's ability to generate insightful reports and statistics empowers administrators to make informed decisions and drive continuous improvements. Overall, the project's outcome reflects its commitment to delivering a high-quality solution that meets the diverse needs of the educational community.

### **5.2 Conclusion**

In conclusion, the "Hamro Notes" project has achieved its objectives of creating an innovative and scalable mobile application for educational purposes. The collaboration between developers, administrators, and end-users has been instrumental in shaping the platform's success. By prioritizing user feedback, maintaining robust security protocols, and incorporating advanced features like real-time communication and efficient content management, "Hamro Notes" has established itself as a valuable resource for students and educators alike. As the project continues to evolve, ongoing enhancements and updates will further enhance its usability and effectiveness, ensuring its continued relevance in the rapidly evolving educational landscape.

5.3 Screenshots



Figure: Login page

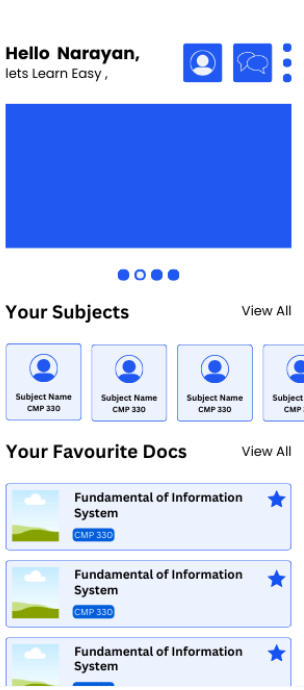


Figure: Home Page

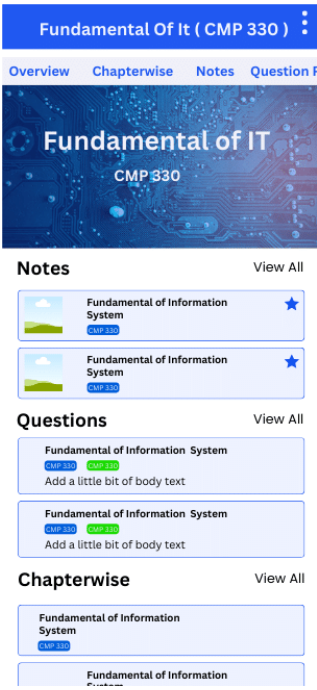


Figure: Course Page



Figure: Course List Page



Figure: Chat Section

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