# Tribhuvan University
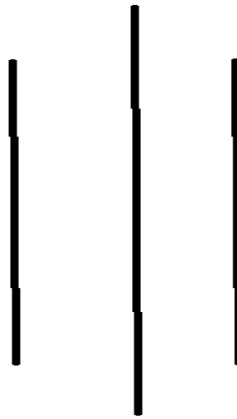# Institute of Engineering
# Central Campus, Pulchowk

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**Submitted To:**
**Department of Electronics and Computer Engineering**

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# ACKNOWLEDGEMENT

We wish to convey our sincere appreciation to the Department of Electronics and Computer Engineering for incorporating Project Work into our curriculum, enabling us to apply our knowledge in real-world scenarios.

We extend our heartfelt gratitude to our Head of the Department, Prof. Dr. Jyoti Tandulkar , and Prof. Aman Shakya for their patient mentorship, motivation, and constructive feedback, which greatly contributed to the successful completion of this project.

The valuable assistance and guidance provided by our seniors played an indispensable role in the realization of this project.

We would also like to express our thanks to our fellow classmates for their insightful suggestions and feedback throughout the project.

# ABSTRACT

The Internship Management System is a software application designed to facilitate the allocation, administration, and tracking of student internships. The prevalent memorization-based education system has resulted in a significant increase in unemployment among individuals seeking white-collar jobs. To address this issue, the Institute of Engineering (IOE) has recently mandated internships across various faculties to enhance students' practical skills. However, there is currently no effective system in place to manage these internships. Additionally, many companies reach out to the campus department for internship opportunities, but the lack of information, a centralized database, and efficient management hinder the proper organization of internship programs. Consequently, this web-based software has been developed to systematically manage and document all these internship-related activities.

KEYWORDS: Database, Query, Multitasking, Authentication, Server

# Objective

The primary goal of this project is to create an online Internship Management System (IMS) specifically tailored for the Department of Electronics and Computer Engineering. This software aims to facilitate the exchange of internship opportunities among students, the campus community, and external companies.

# Problem Statement

The prevailing system of rote learning has resulted in a workforce lacking practical skills, leading to a surge in white-collar unemployment. The current educational culture places significant emphasis on theoretical knowledge without fostering practical skills. Consequently, there is a pressing need for career-oriented education, with internships being a vital component. In an underdeveloped country like ours, employment opportunities are limited, and many students remain unaware of available internship opportunities due to the lack of proper management. This project seeks to address these issues by establishing an efficient internship management system within educational institutions.

# Objectives

The objectives of this project include:

Developing a web-based internship management application.
Ensuring equitable access to internship opportunities for all students.
Facilitating seamless coordination between students, the department, and external organizations.

# Literature Review

In the past, managing and recording internships through paperwork proved challenging. Several internship management systems were previously proposed but were deemed incomplete and unable to meet all requirements. This project aims to be a comprehensive solution, fulfilling all the department's internship management needs.

# Intended Audience

This project is designed to benefit the department, students, and companies involved in assigning and managing internship programs. Its primary target audiences are students, companies, and the department itself.

# Product Scope

The system can be utilized to:

Add, assign, modify, and update internships by the department.
Assist other educational institutions, banks, etc., in managing their internship programs.
Evolve into a web platform connecting internship seekers with companies searching for employees.

# Overall Description

# Technical Description

The Internship Management Software (IMS) is a web-based system for managing internship programs. This system incorporates robust authentication, synchronized databases, and a multi-level user hierarchy, including administrators, students, and employers.

Employers can request new internship programs within their organizations, create profiles, and provide program details.
Students can request internships in programs of interest through their detailed profiles.
Administrators serve as super-users, verifying profiles, approving programs, and managing and assigning internships to students.
Operating Environment
The IMS, based on PHP, operates in the following environment:

Operating System: Windows/Linux/macOS
Database: MySQL
Platforms: HTML, CSS, Bootstrap
System Design
The IMS is developed using PHP as the programming language, MySQL for the database, and HTML, CSS, Bootstrap, and JavaScript for the interactive front-end.

# Methodology

PHP, a server-side scripting language, is employed to create dynamic web pages that interact with databases. It is renowned for its use in web application development and its compatibility with various database systems, such as Oracle and MySQL.

MySQL, an open-source relational database management system, is used for data storage and retrieval. It is widely recognized for its application in web and online publishing.

The project employs a waterfall development model, which includes the following phases:

Requirement Gathering and Analysis
System Design
Implementation
Integration and Testing
Deployment of System
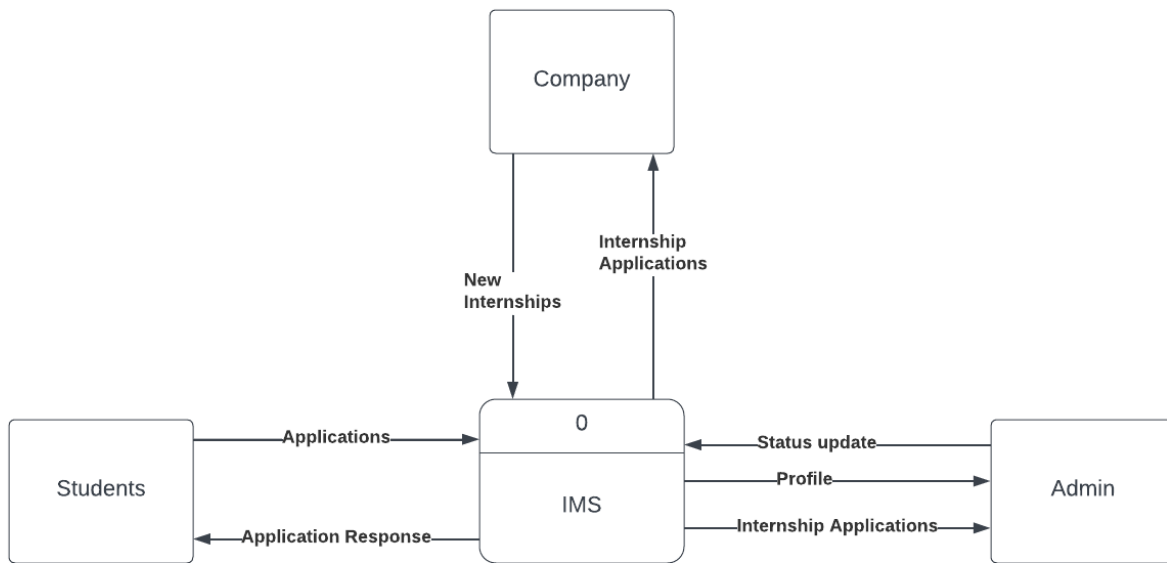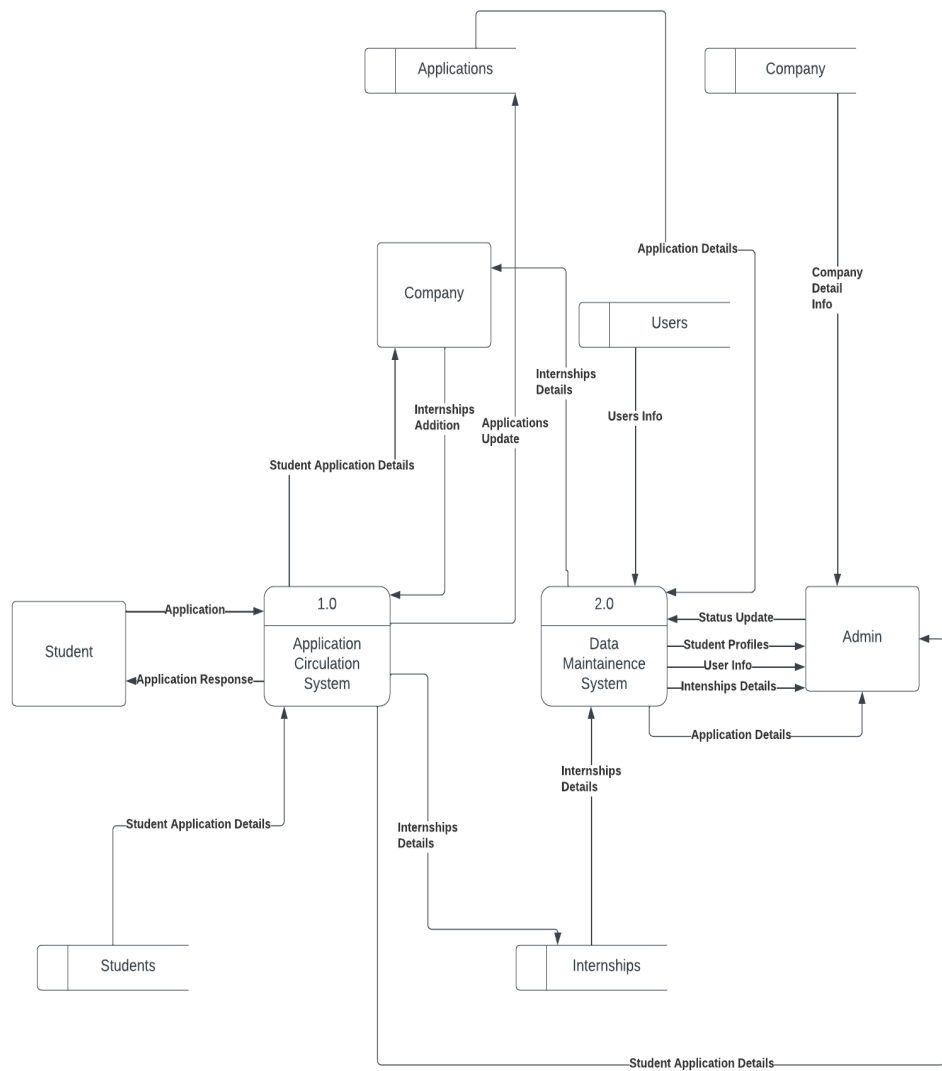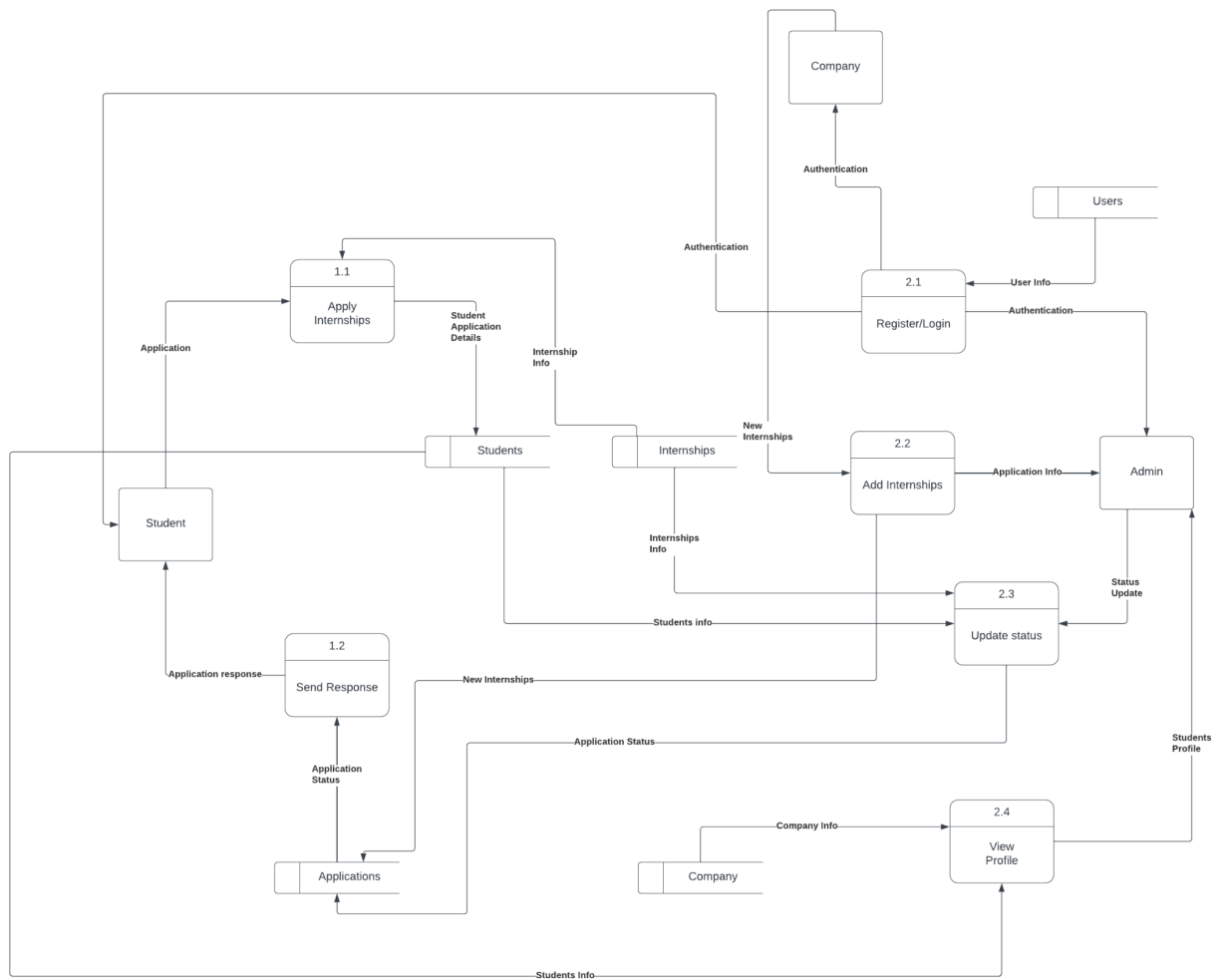Maintenance

**DATA FLOW DIAGRAM:**



**Fig: Lvl 0 DFD**

Applications

Company

Company

Users

Application Details

Company
Detail
Info

Internships
Details

Internships
Addition

Applications
Update

Users Info

Student Application Details

| | 1.0 | |
| Application Circulation System |

| | 2.0 | |
| Data Maintainence System |

Admin

Student

Application

Application Response

Status Update

Student Profiles

User Info

Intenships Details

Application Details

Internships
Details

Student Application Details

Internships
Details

Students

Internships

Student Application Details

**Fig: Lvl 2 DFD**

**Fig: Use Case Diagram**

**COMPANIES**

| PK | company_id |
|----|------------|
| FK | user_id |
| | name |
| | address |
| | contact_person |
| | email |
| | phone |
| | website |
| | created_at |

**STUDENTS**

| PK | student_id |
|----|------------|
| FK | user_id |
| | name |
| | email |
| | phone |
| | gender |
| | skills |
| | department |
| | dob |
| | status |
| | year_of_studey |
| | created_at |
| | profile_picture |
| | cv |

**USERS**

| PK | user_id |
|----|---------|
| | username |
| | password |
| | role |

**INTERNSHIPS**

| PK | internship_id |
|----|---------------|
| FK | admin_id |
| | title |
| | company_name |
| | descripsion |
| | start_date |
| | end_date |
| | status |
| | duration |
| | salary |
| | location |
| | company_id |

**APPLICATIONS**

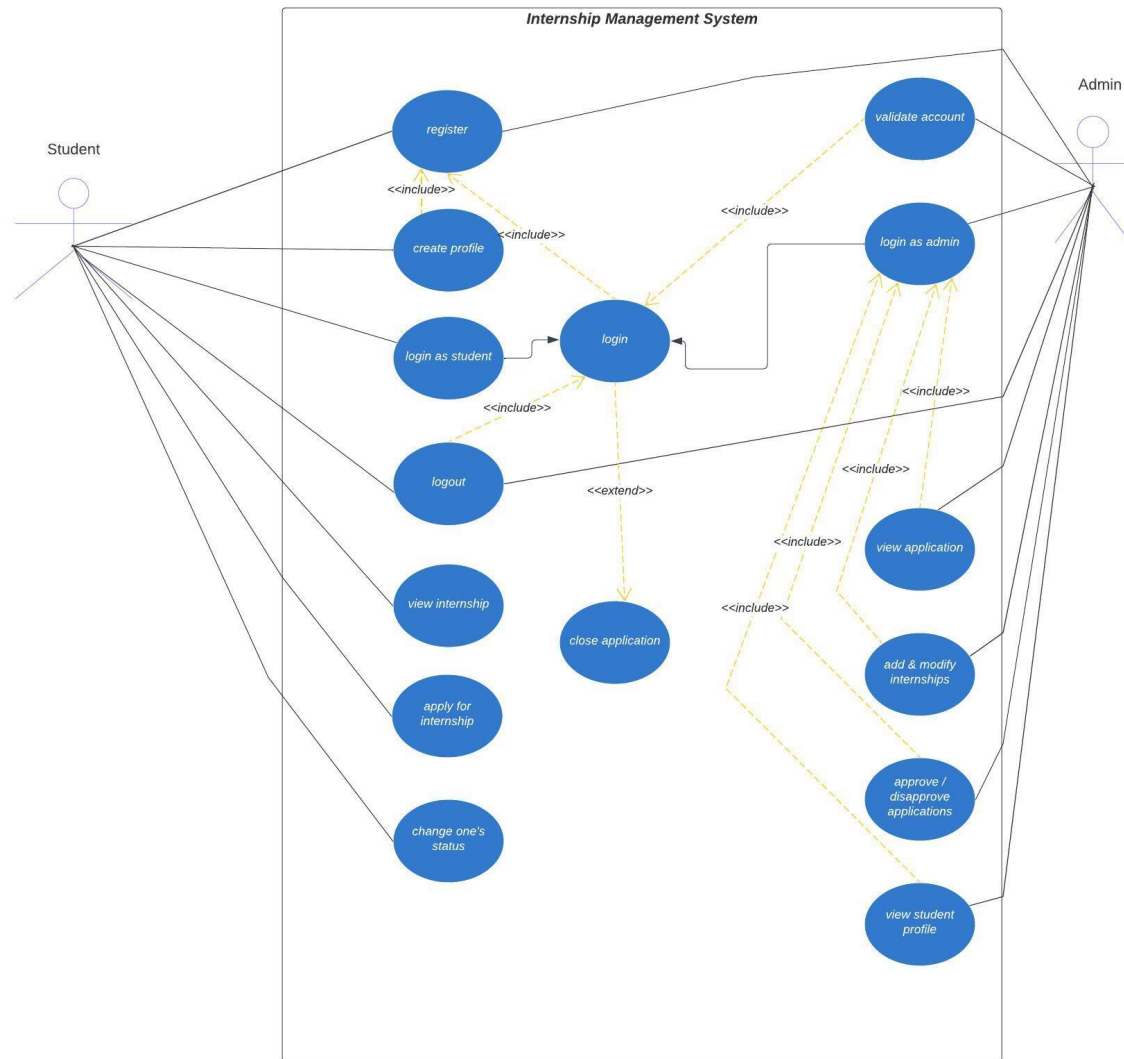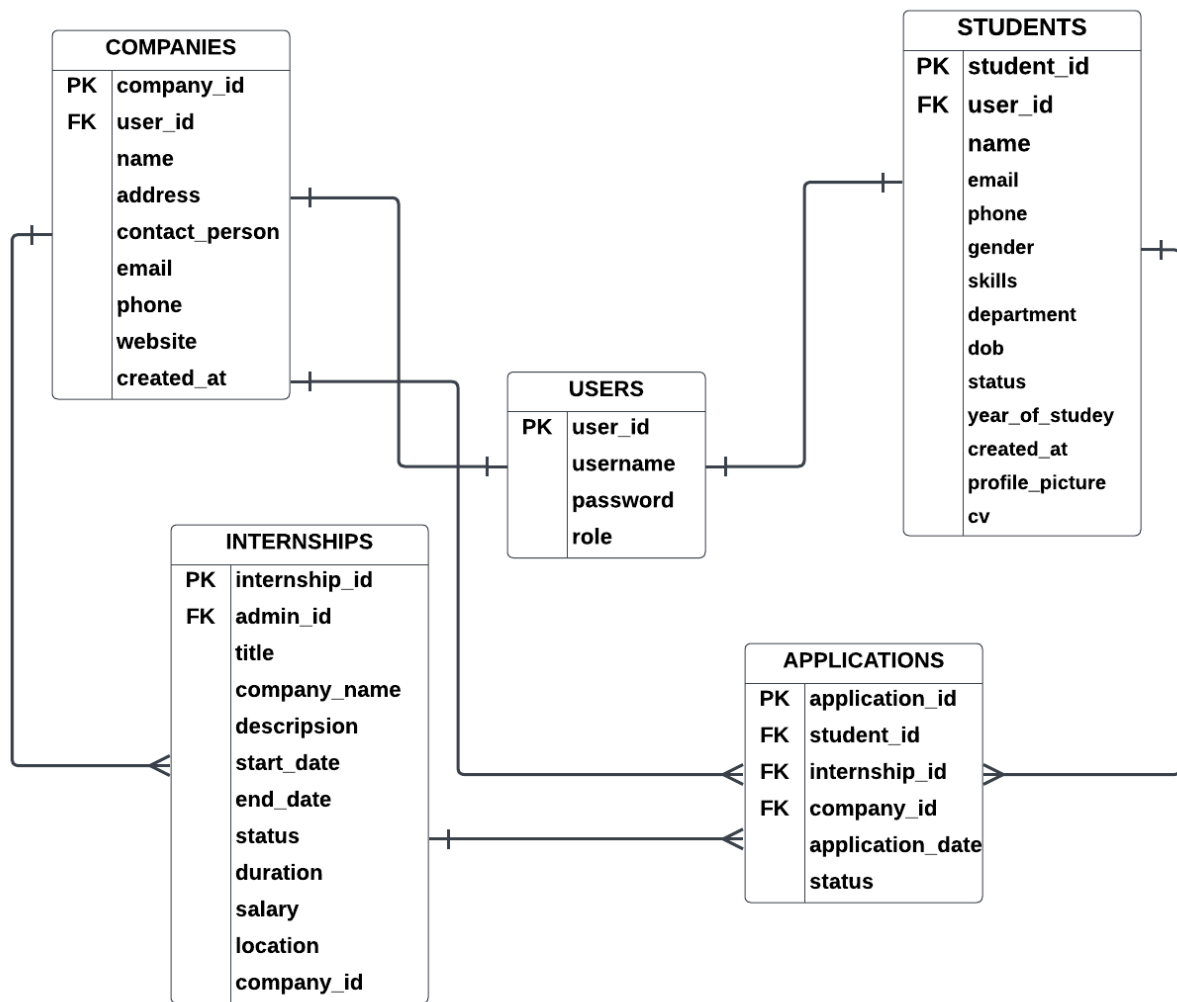| PK | application_id |
|----|----------------|
| FK | student_id |
| FK | internship_id |
| FK | company_id |
| | application_date |
| | status |

**Fig: ER Diagram**

# USER MANUAL

*Running the Application: Docker or XAMPP*

We have two options for running this application, depending on your preference and requirements: Docker or XAMPP.

# DOCKER

**Step 1: Install Docker for Windows**

- ❖ Go to the Docker website at https://www.docker.com/products/docker-desktop.

- ❖ Click on the "Download for Windows" button to download the Docker Desktop installer.

- ❖ Run the installer you downloaded. You may be prompted to grant administrative privileges to the installer.

- ❖ Follow the on-screen instructions to install Docker Desktop. This may involve accepting license agreements and choosing installation options.

- ❖ During the installation, Docker Desktop may request permission to enable Hyper-V, a feature required for running virtualized containers on Windows. Allow this if prompted.

- ❖ Once the installation is complete, Docker Desktop should start automatically. You'll see the Docker whale icon in the system tray, indicating that Docker is running.

**Enabling WSL (Windows Subsystem for Linux) using "Turn Windows features on or off"**

- ● Press the Windows key on your keyboard or click on the Windows Start button in the taskbar

- ● Type "Turn Windows features on or off" in the search bar and press Enter. This will open the "Turn Windows features on or off" dialog.

- ● In the "Turn Windows features on or off" dialog, scroll down and locate the "Windows Subsystem for Linux" option. It should be labeled as "WSL" or "Windows Subsystem for Linux."

- ● Check the box next to "Windows Subsystem for Linux" to enable it.

- ● Click the "OK" or "Apply" button. You may be prompted to restart your computer to complete the installation. If so, save any unsaved work and restart your computer.

- Once your computer has restarted, you have successfully enabled WSL.
  After all the required installation Follow these steps for running the app:

  ➢ **Enable WSL (Windows Subsystem for Linux):**

    ■ If you haven't already enabled WSL, please follow the instructions in the "Enabling WSL (Windows Subsystem for Linux)" section of this manual.

  ➢ **Navigate to the Project Folder:**

    ■ Open your terminal or command prompt.
    ■ Use the cd command to navigate to the folder containing your project's Docker configuration files, typically including a docker-compose.yml file.

  ➢ **Start the Docker Containers:**

    ■ Run the following command in the terminal:
    ■ Copy code docker-compose up

  This command will initiate the installation of all required dependencies and start the project's containers.

  ➢ **Access the Project in Your Web Browser:**

    ■ Open your web browser.
    ■ In the address bar, type localhost:9000 and press Enter.
    ■ The project should now be up and running, accessible at port 9000 on your local machine.

  We're Good to Go! The project is now running successfully using Docker. We can interact with it through your web browser.

# Run Project using XAMPP Control Panel

You can follow the given instructions to fire up this project using the XAMPP Control Panel.

**1. Install XAMPP:**
- Download the latest version of XAMPP for your OS from the official website (https://www.apachefriends.org/).
- Complete the installation following the on-screen instructions.

**2. Start XAMPP Control Panel:**
- Once installed, open the XAMPP Control Panel.
- Start the Apache and MySQL services by clicking the "Start" button next to each service.

**3. Configure MySQL:**
- You will be directed to http://localhost/phpmyadmin after clicking the "Admin" button in MySql service. If not, open the link manually using your browser.
- Create a new database for your web app by clicking on the "Databases" tab and entering a name for your database.

**4. Set Up Your Web App:**
- Navigate to the XAMPP directory (located in 'C:\xampp' on Windows or '/opt/lampp' on Linux).
- Inside the 'htdocs' folder, create a new folder for your web app.
- Place your PHP files and other assets (HTML, CSS, JavaScript) in this folder.

**5. Upload SQL file :**
- Import your database file(.sql) in the Import tab in your database.

**6. Setup "Config.php" file:**
- Remember to replace 'localhost', 'username', 'password', and 'database_name' with your actual database host, username, password, and database name respectively.

**7. Access Your Web App:**
- Open your web browser and enter "http://localhost/your-web-app-folder" in the address bar.

**LOGIN (As Administrator)**

Email: admin
Password :admin

As user
Email:binit
Password:binit

**REGISTER  (As Student)**

## Register

**Username:**

**Password:**

**Name:**

**Email:**

**Phone:**

**Gender:**

Male

**Skills:**

**Department:**

**Date of Birth:**

mm/dd/yyyy

**Status:**

Available

**Year of Study:**

**Role:**

Student

Register

**AFTER LOGGED IN (As Company)**

- Company admin can add new internships by clicking on "Add New Internship" button at the left bottom corner of the page.

**Internship Applications**

| Application ID | Student Name | Company Name | Internship Title | Application Date | Status | Action |
|---|---|---|---|---|---|---|
| 40 | bishal | bhoooos | php backend engineer | 2023-08-31 15:43:43 | Pending ⌄ Update | View Profile |
| 39 | Binit | bhoooos | php backend engineer | 2023-08-16 02:55:13 | Pending ⌄ Update | View Profile |
| 36 | Binit | digital | marketing | 2023-08-15 16:10:47 | Approved ⌄ Update | View Profile |
| 35 | Agrim Paneru | bhoooos | php backend engineer | 2023-08-02 14:34:13 | Approved ⌄ Update | View Profile |

Logout

## AFTER LOGGED IN (As Admin)

**Internship Applications**

| Application ID | Student Name | Internship Title | Application Date | Status | action |
|---|---|---|---|---|---|
| 39 | Binit | php backend engineer | 2023-08-16 02:55:13 | pending | View Profile |
| 40 | bishal | php backend engineer | 2023-08-31 15:43:43 | pending | View Profile |
| 35 | Agrim Paneru | php backend engineer | 2023-08-02 14:34:13 | approved | View Profile |

Logout

- Admin can view the detailed profile of specific applicants by clicking the "View Profile" link under the Action menu.
- Also, admin has the privilege to Accept and Reject the application based on their skills and profile.

## View Profile Section

**Student Profile**

**Name: Agrim Paneru**

Email: agrim008@gmail.com
Phone: 987654241
Gender: Male
Department: Computer
Date of Birth: 1998-08-13
Status: Available
Year of Study: 2079

**CV**

Go Back to Applications

**Edit Profile Section**

## Edit Profile
### Back to Dashboard

Name:

bishal

Email:

bishal123@gmail.com

Phone:

9876543210

Gender:

Male ⌄

Skills:

master in all skills

Department:

computer

Date of Birth:

09/09/2002

Year of Study:

2077

Profile Picture:

Choose File | No file chosen

CV:

Choose File | No file chosen

Save Changes

**Internship List (Logged in as User)**

User can see internship

User can apply for internship

### Internship List

**php backend engineer**

bhoooos

hello

Start Date: 2023-08-19

End Date: 2023-08-26

Duration: 1 month

Salary: 100$

Location: kathmandu

Apply

**marketing**

digital

student should have a sound knowledge on digital marketing

Start Date: 2023-08-16

End Date: 2023-08-28

Duration: 5 months

Salary: 500$

Location: Dhobighat,Kathmandu

Apply

**Company Dashboard**

# Welcome, bhoooos!

**Company Name:** bhoooos
**Email:** bhoooos@gmail.com
**Phone:** 9878787787
**Address:** Sanepa,Kathmandu
**Contact Person:** Mr. Agreem Karki
**Website:** https://bhoooos.com

## Manage Internships

Add New Internship

View Internship Applications

Logout

**Confirmation Page**

# Confirmation Page

## Details of the Applied Internship:

**Student ID:** 5

**Internship ID:** 16

**Status:** pending

**Title:** php backend engineer

**Company Name:** bhoooos

**Description:** hello

**Start Date:** 2023-08-19

**End Date:** 2023-08-26
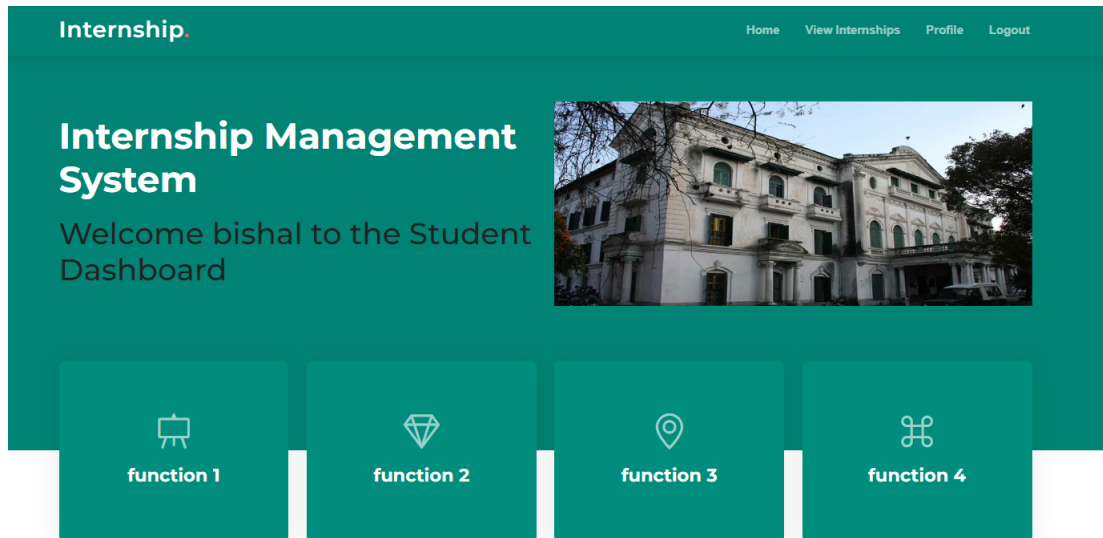
**Duration:** 1 month

**Salary:** 100$

**Location:** kathmandu

Are you sure you want to apply for this internship?

Confirm

Cancel

**Student Dashboard**



**Add New Internship (As Company Login)**