

BUTWAL MULTIPLE CAMPUS
Tribhuvan University
Institute of Science and Technology



A Final Year Internship Project Report

On

Web Developer

At

LGM Nepal Pvt. Ltd.

CSC[462]

Submitted To

Department of Computer Science and Information Technology

Butwal Multiple Campus

**In partial fulfillment of the requirement for the Bachelor Degree in
Computer Science and Information Technology**

Submitted By

Namuna Bhattarai

TU Exam Roll No: 16897/074

August 2022

SUPERVISOR’S RECOMMENDATION LETTER

I hereby recommend that the report prepared under my supervision by **Mrs. Namuna Bhattarai** (TU Exam Roll No. 16897/074) entitled “**Web Developer**” at **LGM Nepal Pvt. Ltd**” in partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Information Technology be processed for evaluation.

.....

Bhuban Panthee

Supervisor, Department of CSIT

Butwal Multiple Campus

Golpark, Rupandehi

CERTIFICATE OF APPROVAL

The undersigned certify that they have read and recommended to the Department of Computer Science and Information Technology for acceptance, an internship report submitted by **Mrs. Namuna Bhattarai** in partial fulfillment for the degree of Bachelor of Science in Computer Science & Information Technology (B.Sc. CSIT).

Bhuban Panthee

Internal Examiner

Department of Computer Science and IT

Butwal Multiple Campus

Golpark , Rupandehi

External Examiner

CDCSIT

Tribhuvan University

Kirtipur, Nepal

ACKNOWLEDGEMENT

I would like to thank both the LGM Nepal and the university for the opportunity they gave me to do this internship which has helped boost my knowledge of software development and testing.

Special thanks should go to my organizational supervisor, **Mr. Subodh Regmi** for hosting my internship. His guidance, patience and encouragement despite his busy schedule have allowed me to gain a better understanding and appreciation in the field of software development life cycle (SDLC) process.

I would like to thank, **Bhuban Panthee**, college internship supervisor for the support and advices to get and complete internship in above said organization.

I also would like to thank other senior developers of LGM Nepal, **Mr. Mahesh Adhikari**, **Mr. Sushil Neupane** and **Mr. Sushan Chhetri**. Like my organizational supervisor these developers have also been helpful in the process.

I also give special thanks to the LGM Nepal' Business Analysts and Project Managers who also have been helping in understanding us how various backlogs should be performed and documentations should be maintained.

This wouldn't be possible without the sound support and guidance from coordinator of the college, **Mr. Sunil Kumar Yadav**. I would like to dedicate heartly gratitude to him for always nurturing us. The friendly environment he has built within the college is the main reason for the success of many students like me. I would also like to thank entire college's teaching staffs for their unquestionable support.

Lastly, I would like to thank my family for all their continued support rendered during internship period.

Sincerely,

Namuna Bhattarai

TU Exam Roll No: 16897/074

ABSTRACT

Human Resource Management Systems is the key factor to facilitate and attain efficient way to manage employees in an organization. Event Management system is also another main factor that helps in managing or organizing the events inside the organization. The project “PROJECTVIO” is based on HR management system to keep all the data and records of the organization and events in a systemized manner. The project goal is to introduce technology in its day-to-day activities and to make easy access for authorized people to extract required information about foundation. This application aims to build a user-friendly Dashboard website, where employees will be able to keep their daily log status about their work in the organization. It helps admins to record attendance and create attendees’ list to conduct standup scrum meetings. Other features include upload and view documents related to knowledge sharing sessions, view and edit employee details and generate teams based on the names provided. This system is enough to bring change in traditional filing system of organization. Role based login features enabled the system to be protected from unauthorized access.

Keywords: *PROJECTVIO, management, employee, details, logs.*

TABLE OF CONTENTS

SUPERVISOR’S RECOMMENDATION LETTER	i
CERTIFICATE OF APPROVAL	ii
ACKNOWLEDGEMENT.....	iii
ABSTRACT.....	iv
LIST OF ABBREVIATIONS	vii
LIST OF FIGURES	viii
LIST OF TABLES	ix
CHAPTER 1: INTRODUCTION.....	1
1.1 Introduction to Internship	1
1.2 Problem Statement	1
1.3 Objectives	2
1.4 Scope and Limitation	2
1.5 Report Organization.....	3
CHAPTER 2: ORGANIZATION DETAILS AND LITERATURE REVIEW	4
2.1 Introduction to Organization.....	4
2.1.1 Organizational Background	4
2.1.2 Services Provided by the Organization.....	4
2.2 Organizational Hierarchy.....	5
2.3 Working Domains of Organization.....	5
2.5 Literature Review.....	6
2.5.1 Background and Contextual Research	6
2.5.2 Related Works.....	7
CHAPTER 3: INTERNSHIP ACTIVITIES	11
3.1 Roles and Responsibility.....	11

3.2 Weekly log	11
3.3 Description of the project involved during internship	16
3.3.1 Placement	16
3.3.2 Duration	16
3.3.3 Working Environment	16
3.3.4 Module of the project.....	17
3.3.5 Module Description	17
3.3.6 Relational Model.....	19
3.4 Tasks/Activities Performed.....	20
3.4.1 My contributions.....	20
CHAPTER 4: CONCLUSION AND LEARNING OUTCOMES	22
1.Conclusion	22
4.2 Learning Outcomes	23
REFERENCES.....	24
APENDICES	25

LIST OF ABBREVIATIONS

APA	American Psychological Association
API	Application Programming Interface
CRUD	Create, Read, Update, and Delete
CSS	Cascading Style Sheets
DB	Database
DOM	Document Object Model
ERD	Entity Relationship Diagram
HR	Human Resources
HTML	Hypertext Markup Language
HTTPS	Hypertext Transfer Protocol Secure
IT	Information Technology
JS	JavaScript.
JWT	JSON Web Token
KSS	Knowledge Sharing Session
MFA	Multi-factor Authentication
MVC	Model View Controller
ORM	Object Relational Mapping
PHP	Hypertext Preprocessor
QA	Quality Assurance
SDLC	Software Development Life Cycle
SQL	Structured Query Language
TBS	Team Building Session
UI/UX	User Interface/User Experience

LIST OF FIGURES

Figure 2.1 Organizational Chart	5
Figure 2.2 PeopleGuru	8
Figure 2.3 Bitrix24.....	9
Figure 2.4 CLOUDHR.....	10
Figure 3.1: Use case Diagram for PROJECTVIO.....	17
Figure 3.2: Relational Model of PROJECTVIO.....	19
Figure 4.1: Login Page of PROJECTVIO.....	25
Figure 4.2: Dashboard of PROJECTVIO.....	26

LIST OF TABLES

Table 3.1: Timeline for Internship.....	12
---	----

CHAPTER 1: INTRODUCTION

1.1 Introduction to Internship

As a part of the course requirement of the 8th semester of the Bachelor of Science Computer Science and Information technology (BSc CSIT) degree of Tribhuvan University, all students are required to complete a six credit (minimum 10 weeks/180 hours long) internship.

The internship experience is expected to assist the students to face complex real-world problems. Going to a college or university is a critical step, but one can greatly enhance their classroom learning by gaining real world experience through college student internships. In addition to gaining great experience to complete our classroom learning, college internships allow us to beef up our portfolio or resume and make valuable industry contacts that can be essential to landing the ideal job upon graduation.

Further, as college student internships are also competitive, one can make the most of other opportunities available to them by finding a campus job in their field. College internships are beneficial because they get us both experience and contacts.

Graduating students with paid or unpaid internships on their resume have a much better chance at landing a full-time position upon graduation. Students are doing internships as undergraduates, and it is now not unusual for recent grads to take an unpaid internship with hopes of turning it into a permanent position or at least making some contacts and building their resume.

1.2 Problem Statement

There is still the use of traditional file-based system to keep record in the office. In order to entry records and search record, it become very extensive work. It is possible that the same information may be duplicated in different files, this leads to data redundancy results in memory wastage. Accessing data is not convenient and efficient in file processing system. This project helps to keep records in Database Management System which helps to overcome these issues. Also, the website helps to give the necessary information about the office, its works and services in single location.

LGM Nepal currently manages all the employee details and events through different systems. This lacks the proper coordination between the databases handling all these activities. It has created difficulties in updating and retrieving information to multiple platforms. Searching one employee information is also difficult task since admin has to go through multiple systems and hence consume times a lot. The data is also stored redundantly throughout different systems.

1.3 Objectives

The BSc. CSIT internship program is designed to develop professional skills among students and help them become familiar with the working environment. Before setting up all the parameters for the internship there should be proper vision about what might be the goal or objectives of the internship and project. The following are the list of the some of the objectives that has been reported in discussing the internship and project.

- To manage the employee.
- To view the notice regarding official announcement.
- To record the performance of employee and pay award according to their performance.
- To assign task to the employee and see progress of the task.

1.4 Scope and Limitation

The main purpose of this project is to create a responsive web application where the employees can manage their database properly in an organization. This report consists of the details of the work that I performed during my internship period in LGM Nepal Pvt. Ltd. During the internship period.

Some of the scopes of this project are:

- Managing employees' details in a single database system.
- Keeping the daily logs of the work of the employee.
- Managing the employees' daily attendance sheet and scrum meetings.
- Handling the database of the events like Games and Knowledge Sharing Sessions in a proper systemized manner.

Some of the limitations of this project are:

- Each and every part of the functioning of the organization has not been described as there are restrictions due to the privacy policies of the organization.
- Economic details of the project have not been mentioned due to confidentiality issues.

1.5 Report Organization

The contents of the report are organized into the following sections

Chapter 1 discusses the introduction to the project with the objectives to be met. Also, the scope and limitations of the project are discussed.

Chapter 2 discusses the background study of the organization and literature review. Organization introduction, hierarchical structure, working domains and department units are discussed. Studies of various systems and architecture are reviewed in this section through which the foundation of the project was set up.

In Chapter 3, all the internship activities are described here. It includes roles and responsibilities during internship, weekly logs maintained during internship, description of the project involved during internship and activities performed in it.

In Chapter 4, the conclusion of the report and learning outcomes of the internship are discussed here.

In the end, all the references are mentioned in the APA format.

CHAPTER 2: ORGANIZATION DETAILS AND LITERATURE REVIEW

2.1 Introduction to Organization

2.1.1 Organizational Background

LGM Nepal Pvt. Ltd. was established in 2016 as a software firm based in Kathmandu with an aim to provide software development services to multifarious organizations. LGM Nepal Pvt. Ltd. aims to foster customized software solutions to the clients by understanding the real time problems and thus providing the clients with high end software solutions. The organization emphasizes on creating an ambiance where the customers' values are well understood and are transformed to user friendly solutions. This is well reflected by the organization's goal to 'Customize Values'.

LGM Nepal Pvt. Ltd. has highly technical professionals and support staff. The organization also maintains a roster of software consultants and partners with a multitude of organizations with expertise in various domains. The organization is dedicated to delivering added value to the customers by providing innovative, profit-delivering software as well as technical support and expertise to help the clients achieve their business goals. (*LGM Nepal / LinkedIn*, n.d.)

2.1.2 Services Provided by the Organization

LGM Nepal Pvt. Ltd. provides multiple services in the area of website design and development. The areas of expertise of the organization are:

- 1) Software Development
 - a) Laravel
 - b) Python
 - c) React
 - d) Node
- 2) IT Consulting
 - a) Network Consulting
 - b) Web Consulting
 - c) Software Consulting

2.2 Organizational Hierarchy

LGM Nepal Pvt. Ltd. comprises of an administrative team along with interns, junior and senior developers, web designer, designers, system architecture, DevOps, business analyst, project managers, HRs, executive managers, marketing and sales along with accounts and finance team.



Figure 2.1 Organizational Chart

2.3 Working Domains of Organization

LGM Nepal Pvt. Ltd. was established as a multinational software engineering firm. It provides complete IT management and consulting services to business organizations around the globe, help speed the adoption of new technologies, resolve complicated difficulties that constantly arise throughout digital evolution, and orchestrate continued innovation. The Company mainly focused on strategic IT consulting, Mobile & Web Development, UX Designing, ERP, and Content Management. Its experienced consultants, IT specialists, and computer scientists with expertise in specialized software development, infrastructure optimization, ERP management, and CMS customization make up our highly-skilled, most ethical, and knowledgeable team.

2.4 Description of Intern Department

LGM Nepal Pvt. Ltd has its own organizational hierarchy, for the efficient management and working of the overall organizations. Designing and Development team also comprises of interns who develop the system. There are altogether 8 interns working for the department. The intern field of the work is defined with the interest of the intern and the requirement of the organization. The interns are assigned with the respective supervisor according to their field of work. Accordingly, the interns are managed and supervised by the senior developers of the company to complete the daily task that are assigned to them. The interns need to perform well to complete that task assigned by their supervisor. The interns also need to provides all the details of the worked done in the company to their supervisors in the daily scrum meetings.

2.5 Literature Review

2.5.1 Background and Contextual Research

Human Resource Management System (HRMS) is the web application. The application was the core system of the company LGM Nepal Pvt. Ltd. HRMS has its main three sub-core system: Accounts and Support. Human Resource Management System (HRMS) was developed with Microsoft technologies: LARAVEL, MS SQL SERVER 2019, AZURE. Laravel is a web application framework with expressive, elegant syntax. We believe development must be an enjoyable, creative experience to be truly fulfilling. Laravel attempts to take the pain out of development by easing common tasks used in the majority of web projects, such as authentication, routing, sessions, and caching. MS SQL Server 2019 Express is a free edition of SQL Server, ideal for development and production for desktop, web and small server applications. Azure is a cloud computing services operated by Microsoft for application management via Microsoft managed data centers. Human Resource Management System (IHRMS) is the user-friendly web application basically for enterprise use. The system is well designed and Optimizely developed for simplifying the Human Resource (HR) tasks. The admin (in this case HR) can login in the system to add new employee in the system, remove, update information, modify the report of the

employees. Since, the system is cloud based multiple users can login to the system and perform multiple operations parallelly.

An organized and systematic office solution is essential for all universities and organizations. There are many departments of administration for the maintenance of college information and student databases in any institution. All these departments provide various records regarding students. Most of these track records need to maintain information about the students. This information could be the general details like student name, address, performance, attendance etc. or specific information related to departments like collection of data(Information Management System , n.d.).

The Employees module consists of various features allowing you to perform general human resource management tasks such as employee history, perks and incident reports. It is user-friendly system to keep records of information of employee. It records the current number of employees according to division / department with the automatic updating of figures when people are employed or leave. It keeps records of inactive employees (those not in the company any longer). Employees can update their own details which are sent for managerial authorization before being added to the system. Forms the backdrop for the other modules and can be used as a stand-alone module or integrated into other modules e.g., payroll, leave modules. It provides search facility for easy finding of staff. Security rights define the access people have to the information(*Employee Management System - HR System*, n.d.).

2.5.2 Related Works

1. PeopleGuru

PeopleGuru is an HRMS solution designed to help mid-market organizations manage their entire employee lifecycle efficiently. Their platform includes integrated modules for core HR data, payroll, time & labor tracking, talent management, benefits management, and more. Using PeopleGuru's recruiting tools, high-growth companies can attract, retain, and engage their people, while driving efficiency within their HR operations. Other features include a learning management system, social engagement tools, a health check feature, and modules for scheduling, onboarding, performance, and compensation. PeopleGuru's HRMS system comes with a dedicated client success team including a strategic account manager who will guide you through the onboarding process and beyond(*Best combined payroll and HRMS system for US-based organizations/ BambooHR*, n.d.).



Figure 2.2 PeopleGuru(Dashboard Feature PeopleGuru , n.d.)

2. Bitrix24

Bitrix24 is a leading free HR software platform used by over 8 million businesses worldwide. Available in cloud and on-premise with open-source code access. Employee directory, company calendar, request forms, absence management, work reports, punch clock and more. Its features are:

i. HD video calls & conferences

Create conferences for up to 48 participants, talk without any time limit, record your calls, and change backgrounds.

ii. Chats

Private and group chats - a quick and easy way to discuss ideas and share files.

iii. Worktime tracking

Your team can start/pause/finish their working day using an online time clock built into Bitrix24(Introduction to Bitrix24, n.d.).

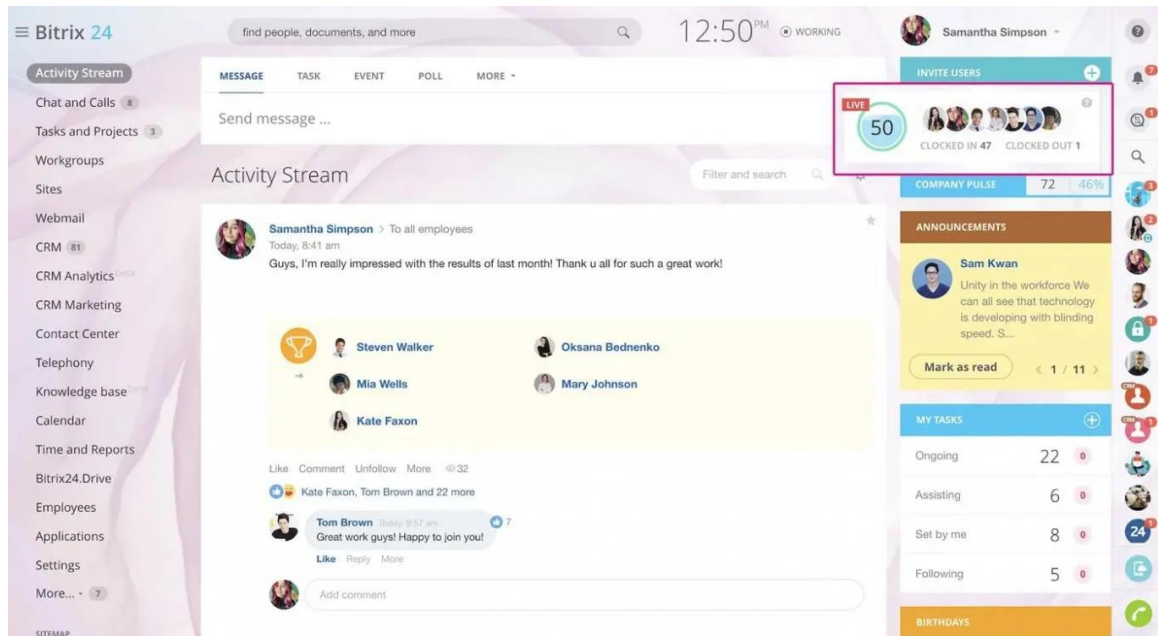


Figure 2.3 Bitrix24 (Dashboard Bitrix24, n.d.)

3. Conrep

CONREP provides you with the competitive tools to improve the productivity of your Sales & Recruiting teams and helps you reduce time-to-hire. Engage the right candidates and make more placements within one integrated system.

Key Features

- i. Requisition Management
- ii. Resume Board Integrations
- iii. Job Posting Automation
- iv. VMS Integration
- v. Outlook Integration
- vi. Bulk-mailing tools
- vii. Submissions & Interviews
- viii. Custom Workflows
- ix. Activity Reports
- x. Self-Service Candidate Portals(CONREP - Fully Featured PSA Software, n.d.)

4. HRCLOUD

HR Cloud delivers three integrated software solutions to improve the way you onboard, engage, and manage your employees: Onboard, Workmates, and HR Suite. Their solutions are designed to automate manual HR processes, deliver an enhanced employee experience, and manage the entire employee lifecycle. The Onboard solution has features for automating manual onboarding processes, as well as features for ensuring employees are equipped on their first day and throughout the onboarding process, such as self-service, employee profiles, customizable new hire portals, and customizable onboarding workflows. HR Cloud offers easy integrations to leading applications and systems such as ADP, Quickbooks, UltiPro, Compass, TalentLyft, Checkr, Indeed, ZipRecruiter, and many more. *(Best Combined onboarding and engagement HRMS / HRCLOUD, n.d.)*

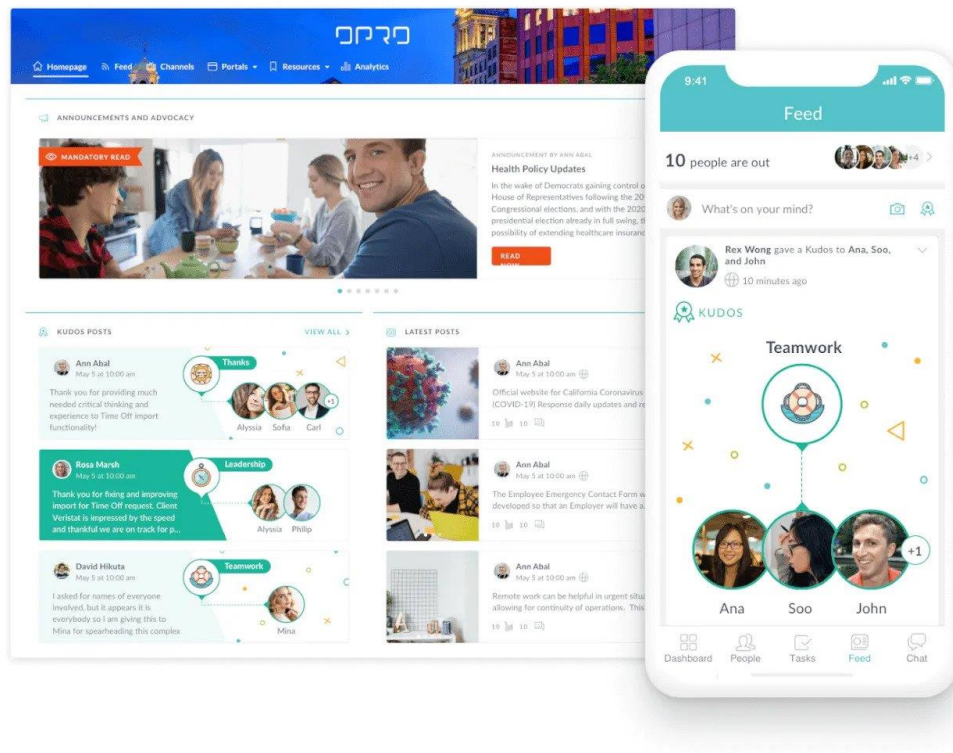


Figure 2.4 HRCLOUD (*Dashboard HRCLOUD* , n.d.)

CHAPTER 3: INTERNSHIP ACTIVITIES

3.1 Roles and Responsibility

Primary the development of all server-side logic, definition and maintenance of the central database, and ensuring high performance and responsiveness to request from the front-end were my assigned responsibilities to the project given to me. Other specific responsibilities those were set to perform were:

- Integration of user-facing elements developed by a front-end developer with server-side logic.
- Building reusable code and libraries for future use.
- Optimization of the application for maximum speed and scalability.
- Implementation of security and data protection.
- Be involved and participate in the overall application lifecycle.
- Main focus on coding and debugging.
- Participate in conferences and educational programs.

Job Description

- Work at the direction of the supervisor to understand programming concepts and apply them to the project assigned.
- Learn and become proficient in one of the mentioned platforms.
- Understand the organizational behaviors and work according to international organization standards.
- Involve and engage in team-building activities.

3.2 Weekly log

The internship will last 3 months. In the first month, Interns will be guided through general concepts of web app development. For the remaining time, the group shall be divided into a specific domain (Backend / Frontend / Quality Assurance) and trained accordingly.

Table 3.1: Timeline for Internship

1st Week	DATE	DAY	TASKS COMPLETED
	04/04/2022	Mon	Team and HR introduction
	05/04/2022	Tues	Get familiar with agile and scrum
	06/04/2022	Wed	Get hands with project tracking tools
	07/04/2022	Thu	Understanding the role of team members in scrum
	08/04/2022	Fri	Review

2nd Week	DATE	DAY	TASKS COMPLETED
	11/04/2022	Mon	Tools → Dev tools, Git (Do's and Dont's), Visualstudio setup, Project Lifecycle, SDLC
	12/04/2022	Tues	HTML/CSS (Semantics, Tags, Positioning, Flex-box, Grid)(Contact Forms)
	13/04/2022	Wed	RWD, Mobile First Design (Enhanced Forms)
	14/04/2022	Thu	JS, DOM manipulation (onClick, Events, Prop, Local Storage)
	15/04/2022	Fri	React CRA, Folder Structure, Package JSON, Dependencies, Dev-Dep, Scripts,

3rd Week	DATE	DAY	TASKS COMPLETED
	18/04/2022	Mon	Functional Components, Class Components,, jquery components, Ajax Components Life Cycle
	19/04/2022	Tues	Higher-Order Components, Error Boundaries, datatables components.
	20/04/2022	Wed	Routers, Forms, and Validation, Styling (Styled Components)
	21/04/2022	Thu	Setup Laravel project , composer installation, basic architecture/structure (MVC workflow and Rest,API development, Backend Terminology
	22/04/2022	Fri	Routes (naming convention), Controller, and Model

4th Week	DATE	DAY	TASKS COMPLETED
	25/04/2022	Mon	Database (SQL) and DB Connection
	26/04/2022	Tues	CRUD operation (HTTPS status code, verb)

	27/04/2022	Wed	SweetAlert,exporting,toggleswitch ,trash and multiple delete function
	28/04/2022	Thu	Authentication Authorization, liveware, laravel breeze, Gates and policies
	29/04/2022	Fri	Manual Testing, Bug reporting, Creating test cases testing, Black box testing, Unit, Integration Testing
5th Week	DATE	DAY	TASKS COMPLETED
	2/05/2022	Mon	Planning for first sprint
	3/05/2022	Tues	Review requirement and database design of employee log.
	4/05/2022	Wed	[Admin][Design] Ability to view daily logs
	5/05/2022	Thu	[Admin][Design] Ability to search logs by employee's name.
	6/05/2022	Fri	Knowledge session and Sprint review

6th Week	DATE	DAY	TASKS COMPLETED
	9/05/2022	Mon	Planning for second sprint
	10/05/2022	Tues	[Admin][Design] Ability to add daily logs
	11/05/2022	Wed	[Admin][Design] Ability to view leave history of employees
	12/05/2022	Thu	[Admin][QA]Ability to view leave history of employees
	13/05/2022	Fri	Game Session and Sprint review

7th Week	DATE	DAY	TASKS COMPLETED
	16/05/2022	Mon	Planning for third sprint
	17/05/2022	Tues	[Admin][Design]Ability to log attendance of each employee
	18/05/2022	Wed	[Admin][API] Ability to view attendance
	19/05/2022	Thu	[Admin][Design] Ability to Update attendance
	20/05/2022	Fri	Knowledge Session and Sprint Review

8th Week	DATE	DAY	TASKS COMPLETED
	23/05/2022	Mon	Planning for forth sprint
	24/05/2022	Tues	[Admin][UI] Ability to create an admin role
	25/05/2022	Wed	[Admin][UI] Ability to create an employee role
	26/05/2022	Thu	[Admin][API] Ability to upload files [Admin][UI] Ability to view files [Admin][UI] Ability to record time [Admin][UI] Ability to record scores of different teams
	27/05/2022	Fri	Game Session and sprint review

9th Week	DATE	DAY	TASKS COMPLETED
	30/05/2022	Mon	Planning for fifth sprint
	31/06/2022	Tues	[Employee][UI] Ability to filter logs
	1/06/2022	Wed	[Employee][UI] Ability to add names
	2/06/2022	Thu	[Employee][UI] Ability to add daily logs
	3/06/2022	Fri	Knowledge Session and sprint review

10th Week	DATE	DAY	TASKS COMPLETED
	6/06/2022	Mon	Planning for sixth sprint
	7/06/2022	Tues	[Employee][UI] Ability to add daily logs
	8/06/2022	Wed	[Employee][UI] Ability to view rules of the session
	9/06/2022	Thu	[Employee][API] Ability to view attendance
	10/06/2022	Fri	Game Session and sprint review

11th Week	DATE	DAY	TASKS COMPLETED
	13/06/2022	Mon	Planning for seventh sprint
	14/06/2022	Tues	[Employee][UI] Ability to view personal information of employees
	15/06/2022	Wed	[Employee][Design] Ability to add personal information of employees
	16/06/2022	Thu	[Employee][Design] Ability to edit personal information of employees
	17/06/2022	Fri	Knowledge session and feedback review

12th Week	DATE	DAY	TASKS COMPLETED
	20/06/2022	Mon	Planning for eight sprints
	21/06/2022	Tues	[UI][Fix]- [Design Issue] - Scrum Card Must Be Left Align
	22/06/2022	Wed	[UI][Fix]- Holiday Calendar Should Not Have Limit in Date
	23/06/2022	Thu	[UI][Fix][Design Issue]- Limit in Employee leave Should be Removed. [UI][Fix][Design Issue]- Card in KSS History Page should be Left Aligned.
	24/06/2022	Fri	Game Session and Review

3.3 Description of the project involved during internship

3.3.1 Placement

The internship period was three months where we gained experience in Software Engineering Intern. The Placement interview was after the completion of 3months trainee period. But there was special offer during the session. Every month's company declared the **Intern of the month** to the student who work best during the months and those students who get that tag for 2 times will directly get placement in Optimum Futurist.

3.3.2 Duration

The standard internship period fixed by the University (TU) is six credit hours, which is equivalent to eight weeks or two months. However, internship period was 3 months.

Office Hour: 10am – 5pm

Start Week: 4th April, 2022

Ending Week: 4th July, 2022

3.3.3 Working Environment

1.Design

We used **Balsamiq** for wireframe and **Figma** for design purpose.

2.Frontend

We used **React** as a frontend for our product. For styling we used **module Sass**.

3.Backend

We used MongoDB, Mongoose, Express as a backend.

4.QA

We have done manual testing and automation testing during the project. We used **Roboto framework** for automation testing.

5.Time division and management

We have used **Azure** for task division and time management.

6. Communication

We have used **Slack** for communication for review, tips and some sort of help.

3.3.4 Module of the project

1.Organization Management

- Holiday
- Event

2.Leave Management

3.Attendance Management

4.Employee Management

5.Profile Management

6.Knowledge Building Session

7.Team Building Session

3.3.5 Module Description

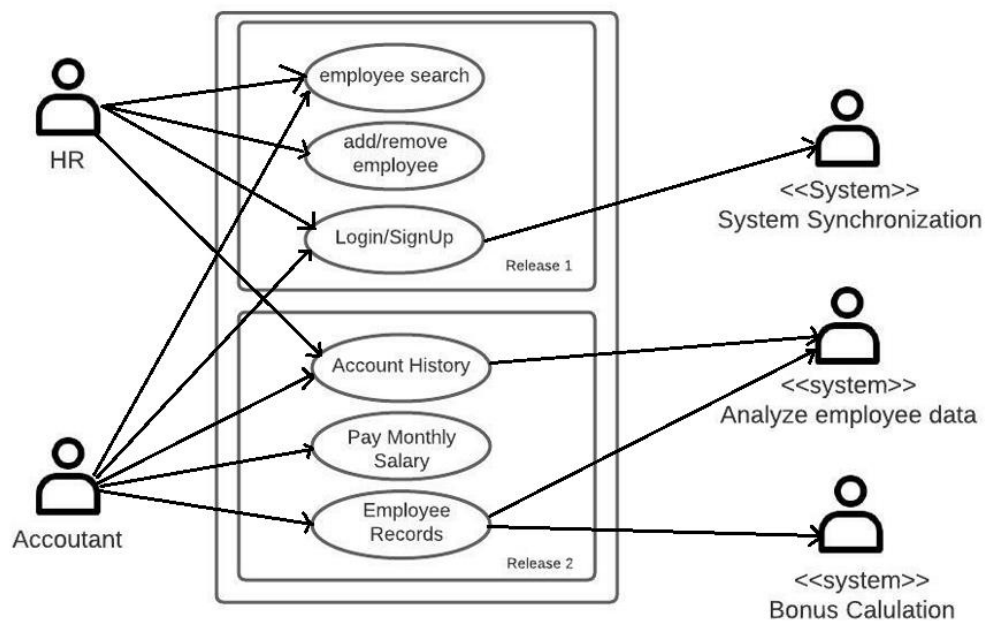


Figure 3.1: Use Case Diagram for PROJECTVIO

1.Organization Management

PROJECTVIO has a special feature which helps to add holiday and special events like birthday and work anniversary. The events are displayed in the dashboard. Same as special occasion like birthday and work anniversary are also displayed in the dashboard.

2.Leave Management

PROJECTVIO has a special feature which provides a UI for applying the leave from our system. The leave requests then send to the admin. The admin can approve or reject the leave from admin dashboard. If admin has to reject leave request, then he/she has to provide the rejection reason. The response can be seen by employee through mail and also from their dashboard.

3.Attendance Management

The project has a feature to record the employee attendance. The admin can also update the attendance. Admin and employee both can view the attendance list of the day. The attendance lists are used to create the standup meetings.

4.Knowledge Sharing Session

The organizer can organize the knowledge sharing session. The organizer should enter the presentation topic, presentation name, presentation date, presentation description. The admin/employee can also view the KSS history.

5. Team Building Session

The organizer can organize the games from our system. First the organizer needs to be selected then the games is selected including the team size. Then the random team is generated and the game is started. The admin/employee can view the game history.

3.3.6 Relational Model

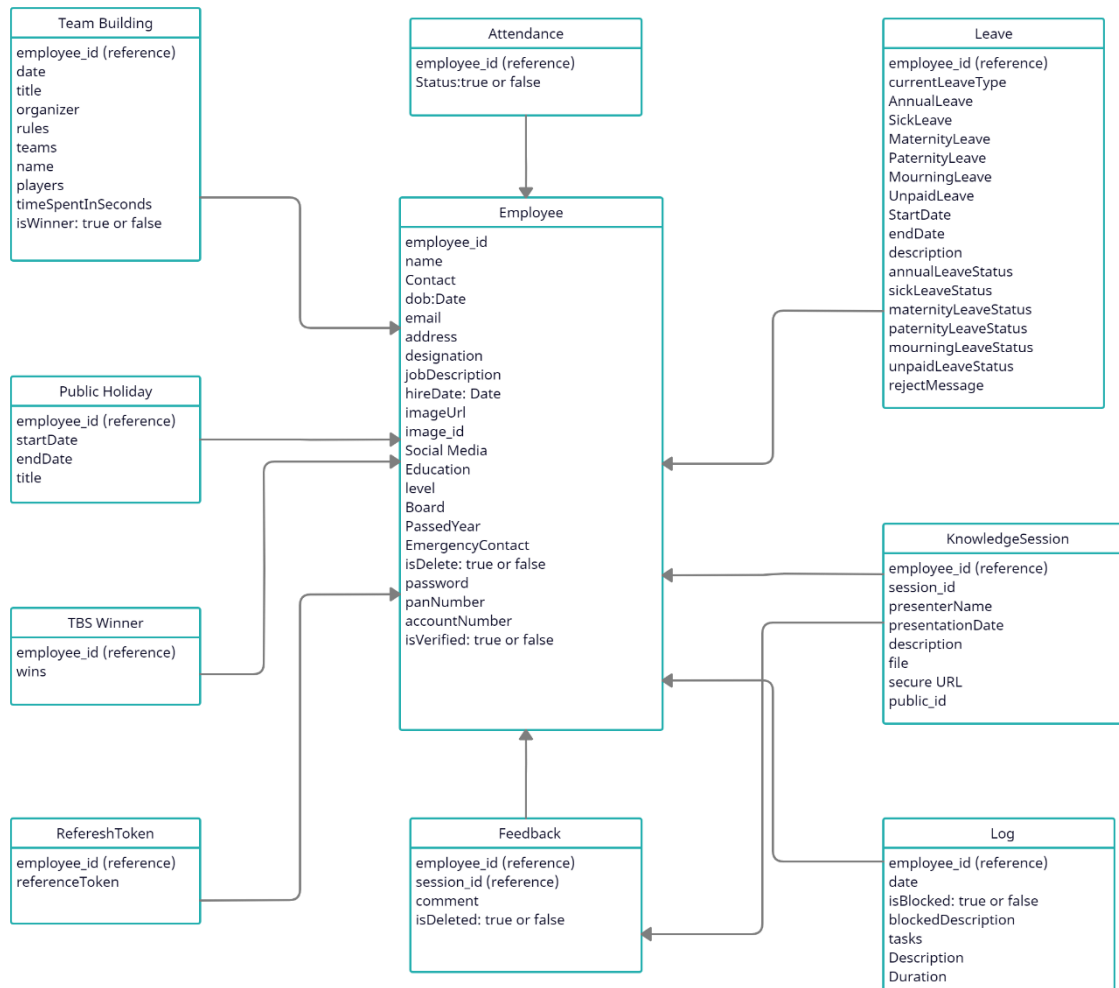


Figure 3.2: Relational Model of PROJECTVIO

The relational model of PROJECTVIO represents how the data are stored in the database and how they are interrelated to each other. Since NoSQL was used the database has collection of Employee, Leave, Attendance, Logs, Knowledge Session, Feedback, Team Building Session, Public Holiday, Team Building Session Winner, and Refresh Token. All the documents have reference to the Employee document in the database. Feedback has reference to the Knowledge Session document.

Along with the document names the object's keys are also defined in above figure. Since data in documents are stored in the form of the object so each key pair should have value associated with it. The attributes of the documents are defined by the keys.

3.4 Tasks/Activities Performed

The name of the project 'PROJECTVIO'. PROJECTVIO, a project initiated by LGM Nepal, is a combination of HR and Event management system that handles all the information related to employees and manages the events that occurs in the organization. It is one-stop solution to record attendance and create attendees' list to conduct standup meetings, log daily status, document details of games played bi-weekly, feedback and scores and use the time feature from within the app. Other features include upload and view documents related to knowledge sharing sessions, view and edit employee details and generate teams based on the names provided.

3.4.1 My contributions

1. Leave Management
2. Attendance Management
3. Knowledge Sharing Session
4. Team Building Session

1. Leave Management

During the intern session I worked in different module. Among them leave module is one of them. In leave module, I made a design for admin view of leave history of employees in the company. Not only this I also did a QA for admin view of leave history of employees in the company.

2. Attendance Management

During the intern session, I also worked on attendance module. Where I made an API for adding attendance of each employee for admin. Then I made an API to view attendance and also ability to update attendance for admin. I also worked on ability to view attendance for employee.

3. Knowledge Sharing Session

During the intern session, I also worked on Knowledge Sharing Session. Where I made an API for ability to record times for admin module and also made a API for ability to record scores of different teams.

4. Team Building Session

During the intern session, I also worked on Team Building Session. Where I made an API for ability to upload files and ability to view files and ability to view rules of the session.

CHAPTER 4: CONCLUSION AND LEARNING OUTCOMES

1. Conclusion

Working as an intern at LGM Nepal Pvt. Ltd. was a great experience for me. This was my first crack at working in a professional environment. Before being involved as an intern in the organization, I only had an outside view and an insight as an observer as to how a professional organization functioned. But after completion of my internship, I got an inside view of professional surroundings and gained experience by being involved in the day-to-day activities directly. The IT industry is one of the leading industries in Nepal today. The internship program helped me learn about the growth of this industry and gain further knowledge about it.

Working at LGM Nepal Pvt. Ltd. also helped me broaden my technical knowledge in the programming field. I only had basic knowledge about programming and basic JS , PHP and LARAVEL as programming language before my involvement as an intern. During my stay in the organization, I also got to broaden my knowledge about Microsoft opensource LARAVEL frameworks, Azure Cloud, Azure DevOps tools and integrated version control system of Azure. I also learnt some basic frontend technologies (React) functionalities.

Overall, the internship program helped me develop skills such as handling real-world problems, working under the rules and regulations of an organization, working under a deadline and working under pressure. It helped me gain technical knowledge as well as professional experience which will be very helpful throughout my professional career.

To conclude, author found that the internship was very beneficial as a part of development of career and the experience gained through this would be helpful and beneficial for the future opportunities. Besides developing project other lessons are also learnt and they are as follows:

- Communication is the crucial part in software development.
- Understanding requirement before jumping for coding.
- Importance of time management.
- Practical implementation of SDLC process.

PROJECTVIO, a project initiated by LGM Nepal, is a combination of HR and Event management system that handles all the information related to employees and manages the

events that occurs in the organization. It is one-stop solution to record attendance and create attendees' list to conduct standup meetings, log daily status, document details of games played bi-weekly, feedback and scores and use the time feature from within the app.

4.2 Learning Outcomes

Working as an intern in LGM Nepal, I learned lots of things. Some of learning Outcomes of me after completion of this intern session are:

1. During the internship session I gained knowledge in web development in AGILE and SCRUM.
2. Gained knowledge about company workflow and their structure.
3. Network with professional in the field.
4. Explored a career, gained confidence, developed and refined skills.
5. Develop work habits and attitudes necessary for job success.
6. Develop communication, interpersonal and other critical skills in the job interview process.
7. Build a record of work experience. Acquire employment contacts leading directly to a full-time job following graduation from college.


REFERENCES

- About us and our Company | LGM Nepal.* (n.d.). Retrieved May 22, 2022, from <https://lgmnepal.com.np/>
- CONREP - Fully Featured PSA Software.* (n.d.). Retrieved May 22, 2022, from https://www.conrep.com/?source=capterra-ats&utm_source=capterra
- Dashboard bitrix24.* (n.d.). Retrieved May 22, 2022, from https://www.bitrix24.com/upload/optimizer/converted/images/content_en/screens/tools/communications/4-online-workspace.1366w.1f3c1ddf2d49abe1ff0c32aba6a90d2e.jpg.webp?1653045869323
- Dashboard HRCLOUD .* (n.d.). Retrieved May 22, 2022, from <https://peoplemanagingpeople.com/go/hrms-for-human-resource-management-peopleguru/>
- Employee Management System - HR System.* (n.d.). Retrieved May 22, 2022, from http://www.intoweb.com/hr/module_employees.php
- Best Combined And Payroll HRMS System for Us Based Organization | BambooHR.* (n.d.). Retrieved May 22, 2022, from <https://info.peopleguru.com/>
- Information Management System .* (n.d.). Retrieved May 22, 2022, from <https://projectabstracts.com/6933/student-database-management-system.html>
- Introduction to bitrix24.* (n.d.). Retrieved May 22, 2022, from <https://www.bitrix24.com/tools/>
- Best combined onboarding and engagement HRMS - HRCLOUD.* (n.d.). Retrieved May 22, 2022, from https://www.hrccloud.com/?utm_source=pmp&utm_medium=referral&utm_campaign=listing&dpm=9280
- LGM Nepal | LinkedIn.* (n.d.). Retrieved May 22, 2022, from *Web Development / Introduction to web development - GeeksforGeeks.* (n.d.). Retrieved May 6, 2022, from <https://www.geeksforgeeks.org/web-development/>

APENDICES

SNAPSHOT

1.Login Page



Login
Access to our dashboard

Email Address

Password [Forgot password?](#)

Login

Don't have an account yet? [Register](#)

Figure 4.1: Login Page of PROJECTVIO

2. Dashboard (Admin)

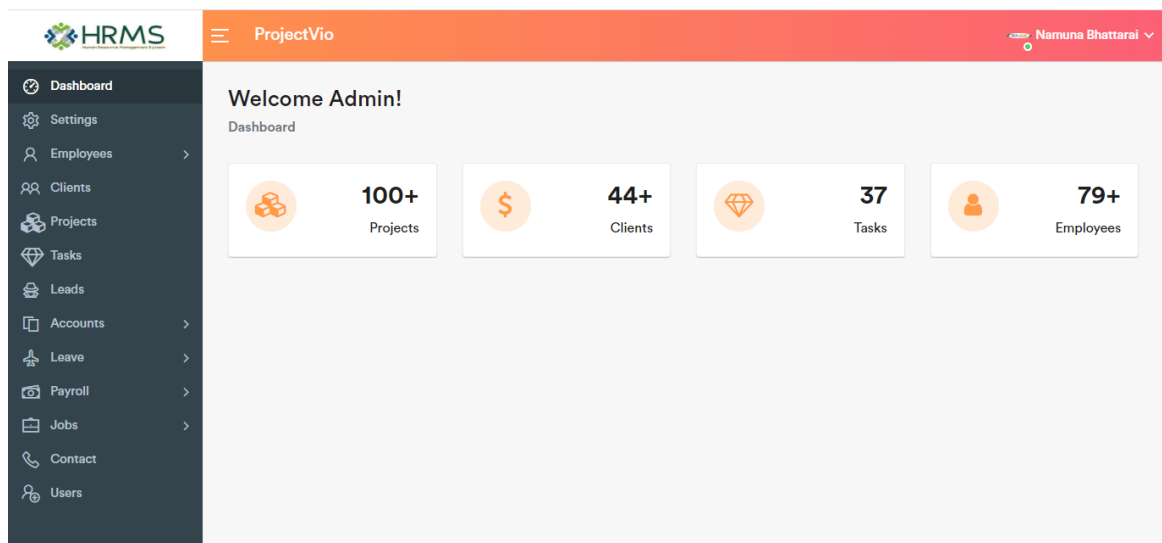


Figure 4.2: Dashboard of PROJECTVIO