

#### **Tribhuvan University**

## **Faculty of Humanities and Social Sciences**

#### INTERNSHIP REPORT ON

Patient Module, Kangaroo Register, Social Register

#### **Submitted to**

**Department of Computer Application** 

Ratna Rajya Laxmi Campus

Pradarsani Marg, Kathmandu, Nepal

Under the supervision of

Shree Krishna Maharjan

In partial fulfillment of the requirements for the Bachelors in Computer Application

**Submitted by** 

Lokesh Raj Bhatt (6-2-59-217-2020)

12/2024

#### **CERTIFICATE OF COMPLETION**

This is to certify that **Lokesh Raj Bhatt** has successfully completed the internship on Laravel web development as part of requirement for the **BCA** at **Easy Access** P. Ltd.

During the internship period, Lokesh Raj Bhatt worked diligently on various tasks, including CRUD using MVC pattern and some ajax related backend problems. His contributions were valuable, and he consistently displayed enthusiasm, a strong work ethic, and an eagerness to learn. We are pleased with the overall performance and commitment demonstrated during this internship. We wish Lokesh Raj Bhatt continued success in his academic and professional endeavors.

•••••

**Dipak Chintan** 

**Internship Mentor** 

**Easy Access** 

MENTOR'S RECOMMENDATION FROM COMPANY

I am pleased to write this letter to highly recommend Lokesh Raj Bhatt for future opportunities.

As an intern at Easy Access, I had the privilege of mentoring Lokesh during his internship from

November 16, 2024, to February 12, 2025.

Throughout his time here, Lokesh consistently demonstrated an exceptional ability to tackle

complex tasks and proactively engage with new challenges. His technical skills, particularly in

Laravel, were impressive. He worked on CRUD operations using the MVC pattern, AJAX-

based backend problem-solving, and other development tasks, making valuable contributions

to our projects.

Moreover, Lokesh is a responsible and diligent individual with a positive attitude and strong

character. His professionalism and dedication have earned him the respect of his peers and

mentors alike.

In summary, I highly recommend Lokesh Raj Bhatt for any relevant job, internship, or

academic opportunity in the field of software development. I am confident that he will continue

to excel and contribute meaningfully in any environment he chooses to pursue.

Please feel free to contact me if you require any further information.

Sincerely,

.....

Dipak Chintan

**Internship Mentor** 

Easy Access

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# **Tribhuvan University**

# **Faculty of Humanities and Social Sciences**

# Ratna Rajyalaxmi Campus Pradarsanimarg Kathmandu

## SUPERVISOR'S RECOMMENDATION

I hereby recommend that this **internship**, completed under my supervision by **Lokesh Raj Bhatt** (6-2-59-217-2020) at **Easy Access**, in partial fulfillment of the requirements for the **Bachelor of Computer Application** (BCA) degree, is recommended for final evaluation.

.....

Shree Krishna Maharjan

**SUPERVISOR** 

Ratna Rajyalaxmi College



# **Tribhuvan University**

# **Faculty of Humanities and Social Sciences**

# Ratna Rajyalaxmi Campus Pradarsanimarg Kathmandu

# LETTER OF APPROVAL

Er. Shree Krishna Maharjan	Mr. Ananda KC
Project Supervisor	Coordinator
Department of BCA	Department of BCA
Ratna Rajyalaxmi Campus	Ratna Rajyalaxmi Campus
Internal Examiner	External Examiner

#### **ACKNOWLEDGEMENT**

I would like to express my sincere gratitude to all those who have supported and contributed to the successful completion of this internship. Without their invaluable assistance, guidance, and encouragement, this work would not have been possible.

The successful completion of this internship would not have been possible without the support and guidance of many individuals and organizations. I feel fortunate to have had this opportunity during my internship, and I would like to take this chance to express my sincere appreciation to everyone involved.

I would like to extend my special gratitude to **Easy Access P. Ltd.** for providing me with the opportunity to work as an intern and for offering continuous support and cooperation throughout the program. I am deeply thankful to **Dipak Chintan** (my mentor) for his invaluable guidance, encouragement, and assistance in tackling the challenges I faced during the internship.

I also wish to express my heartfelt thanks to **Er. Shree Krishna Maharjan** (my supervisor) for his supervision, constant feedback, and constructive suggestions that played a key role in shaping my learning and development.

I would also like to acknowledge my colleagues, friends, and family for their unwavering support and understanding during this time. Their moral support, patience, and encouragement have helped me overcome many challenges along the way.

Thank you to everyone who has been part of this journey.

**ABSTRACT** 

This report details my internship as a Web Development Intern at Easy Access P. Ltd., where I

contributed to the development and integration of a secure user authentication system, handling

AJAX operations, and implement CRUD operations. Throughout the internship, I utilized

Laravel and MySQL to implement an authentication system and Create Read Update and

Delete the tasks using Laravel framework. The report covers my involvement in both frontend

and backend development, database management, and ensuring the system's security. Key

skills gained include collaboration, debugging, testing, and optimizing systems for efficient

performance. The internship provided me with hands-on experience in modern web

development, focusing on user experience, transaction processing, and applying best practices

in coding and system integration.

In addition to technical skills, the internship allowed for the development of strong problem-

solving abilities, effective communication, and teamwork. Collaborating with colleagues from

various departments enhanced the understanding of the software development lifecycle and the

importance of collaboration in achieving project goals.

Overall, this internship provided significant exposure to the practical aspects of software

development and prepared for future professional growth in the field.

**Keywords:** AJAX, CRUD, framework, Internship, MVC, reinforcing, professional.

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## LIST OF ABBREVIATIONS

API: Application programming interface,

CRUD: Create, read, update, and delete.

Laravel: An open-source PHP web application framework.

MVC: Model-view-controller.

ORM: Object-relational mapping.

PHP: A server-side scripting language used for web development.

SEO: Search Engine Optimization.

UI: User interface.

UX: User experience.

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#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Introduction

This report outlines various tasks undertaken throughout the internship. During the internship different works were conducted on the basic CRUD operation of different systems module "Patient Module, Kangaroo Register and Social Register" projects at Easy Access (P.) Ltd.

Easy Access P. Ltd. is a technology-driven company specializing in web development, open-source APIs, education, and certification. The company focuses on leveraging domains to web development that drive social impact, particularly in field of hospitals. By integrating open-source framework Laravel aims to create innovative solution for hospitals worldwide.

A key aspect of this internship is integrating AJAX and handling its operation on the required systems modules. AJAX can be used to create dynamic and interactive web application by allowing web pages to be updated asynchronously, this means there is no need to refresh the page to exchange data with a server in the background.

During the internship, various tasks were undertaken in web development, security implementation to support user authentication. These tasks included implanting secure login mechanism, CRUD operation of all modules. The projects play crucial role in strengthening the platform securely and reliably contribute the company's visions.

#### 1.2. Problem Statement

During my internship at Easy Access, I observed several common challenges in web application development, particularly in Laravel-based projects. Some of these challenges included:

- Managing and optimizing database operations.
- Implementing secure authentication and authorization.
- Efficiently handling CRUD operations.
- Deploying and maintaining applications.

## 1.3. Objectives

Through this internship at Easy Access, I aimed to achieve the following goals:

- To implement patient module Digital Platform System.
- To integrate multi-select operation using slect2 plugin for patient.
- To implement CRUD operation of Patient Module.
- To implement Special New Born Kangaroo Register for Electronic Health Information Management System.
- SNBKR can be selected according to patient who is less then 22 days old and admitted to hospital.
- To implement dependent dropdown using ajax library and implement slect2 plugin.
- To create excel format register for hospital to kept patients record.
- To implement Secure authentication system and implement Social Register.

## 1.4. Scope and Limitation

#### Scope:

- Laravel-Based Web Application Development
- Database Management and Optimization
- Authentication and Security
- Application Deployment
- Industry Best Practices

#### limitations:

- No API Development Experience
- Limited Exposure to Advanced Laravel Features
- Minimal Frontend Development Work

## 1.5 Report Organization

This report is structured into five chapters, detailing the internship experience, company overview, background study, activities performed, and learning outcomes. Below is a brief overview of each chapter:

#### **Chapter 1: Introduction**

This chapter introduces the internship project, outlining the problem statement, objectives, scope, and limitations. It also provides an overview of the report structure.

#### **Chapter 2: Introduction to Organization**

This chapter provides details about the internship organization, including its history, mission, and operations. It also covers the organizational hierarchy, working domains, and a description of the department/unit where the internship was conducted.

#### Chapter 3: Background Study and Literature Review / Related Works

This chapter discusses the fundamental theories, general concepts, and terminologies related to the internship project. Additionally, it includes a literature review of similar projects, theories, and relevant studies conducted in the same domain.

#### **Chapter 4: Internship Activities**

This chapter details the intern's roles and responsibilities, including a weekly log of technical activities performed. It also provides an in-depth description of the projects involved and tasks completed during the internship.

#### **Chapter 5: Conclusion and Learning Outcomes**

The final chapter summarizes the overall internship experience, highlighting key learning outcomes, skills gained, and contributions made during the internship.

# **CHAPTER 2: INTRODUCTION TO ORGANIZATION**

#### 2.1. Organization Details

Easy Access is a technology-driven company established in 2013, specializing in software development, IT solutions, and digital services. The company focuses on delivering innovative and scalable software solutions tailored to the needs of businesses across various industries. With strong expertise in web and mobile application development, Easy Access helps organizations enhance their digital presence and streamline operations.

The company offers a wide range of digital services, including web application development, custom software solutions, and open-source API development. These services are designed to optimize business processes and make powerful digital tools more accessible to both local and global users. Easy Access is also actively involved in IT education, particularly in the field of web design and development, helping build technical capacity in Nepal.

In addition to its technical services, Easy Access fosters a collaborative and learning-oriented work culture. Interns and employees are encouraged to work together on real-world projects, gaining hands-on experience in software development. The company emphasizes industry best practices, promoting innovation, problem-solving, and continuous skill development among its team members.

With a growing portfolio of successful projects and satisfied clients, Easy Access continues to expand its impact in the digital space. Its vision is to become a leading force in South Asia's IT sector by delivering reliable, future-ready solutions that empower organizations, support communities, and drive sustainable digital growth.



Figure 2. 1 Organization's Logo

## 2.2. Organizational Hierarchy

Easy Access (P) Ltd. follows a structured organizational hierarchy designed to ensure efficient workflow, clear communication, and effective project management. The company operates under the leadership of the Board of Directors, with day-to-day management overseen by the Chief Executive Officer (CEO). The CEO is responsible for making strategic decisions and coordinating across departments to achieve the organization's goals.

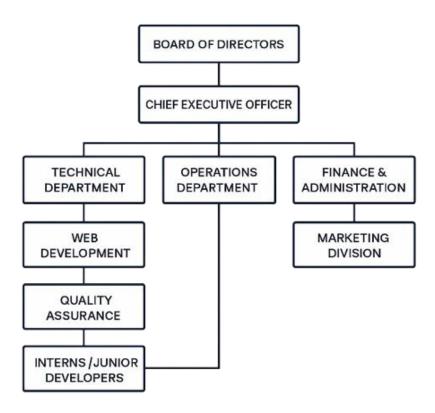


Figure 2. 2 organization hierarchy of Easy Access.

Under the CEO, the company is divided into several key departments, each led by experienced managers. These include the Technical Department, Operations Department, Finance & Administration, and the Marketing Division. The Technical Department further branches into specialized teams such as Web Development, Mobile App Development, and Quality Assurance, each headed by a team lead. Interns and junior developers are typically assigned to these technical teams, where they collaborate on real projects under professional supervision.

The company also has a Marketing and SEO team managed by a Marketing Manager, responsible for promoting services, optimizing digital content, and managing online presence. This hierarchical structure fosters a collaborative environment while maintaining clear roles and responsibilities, enabling both individual and team growth.

## 2.3. Working Domains of Organization

Easy Access (P) Ltd. Has expertise in the following domains:

#### • Software Development:

Easy Access specializes in building custom software applications tailored to the unique needs of businesses and organizations. This includes desktop and web-based systems such as inventory management, online business registration platforms, and digital revenue collection tools.

#### • Web Design and Development:

The company offers responsive and user-friendly website development services, ranging from basic static sites to complex dynamic and e-commerce platforms. These are designed to provide seamless user experiences and meet the specific branding and functional needs of each client.

#### • Mobile application Development:

Easy Access designs and develops cross-platform mobile applications for Android and iOS, with a focus on functionality, user interface, and integration with backend services.

#### • Digital Marketing and SEO:

The organization provides complete digital marketing solutions including search engine optimization (SEO), content strategy, social media management, and online advertising. These services help clients enhance their online presence and drive engagement.

#### Domain Registration and Hosting:

Easy Access assists businesses in establishing their online identity by offering domain registration, along with reliable and cost-effective web hosting services.

#### • IT training and Education:

Through its collaboration with the School of IT, the company provides professional training programs in software development, web design, and other IT skills. These programs are aimed at preparing students and professionals for real-world challenges in the tech industry.

## 2.4. Description of Intern Department/Unit

During my internship at Easy Access Nepal, I was assigned to the **Web Development Unit**. This department plays a pivotal role in executing the company's core services, which include website design and development, e-commerce solutions, and Hospital Managements. The unit is at the forefront of the company's mission to simplify access to modern ICT and digital solutions for businesses and individuals across Nepal.

#### Key Functions and Responsibilities:

- Website Design & Development: The unit is responsible for creating responsive and visually appealing websites tailored to various client needs, including corporate and ecommerce sites.
- E-Commerce Solutions: It builds and maintains secure, user-friendly online stores.
- Digital Marketing & Branding: The team devises digital marketing campaigns.
- Technical Support & Maintenance: The digital platforms remain up-to-date.

As an intern, I actively participated in several projects within the unit. I assisted in the initial stages of website conceptualization, collaborated on back-end coding, and contributed to post-launch support. This hands-on experience allowed me to learn industry-standard practices in web development. Overall, my time in the Web Development Unit not only enriched my technical skills but also deepened my understanding of how digital strategies drive business growth in today's competitive market.

*Table 2.1: Authors Internship duration.* 

Particular	Time
Mentor	Dipak Chintan
Start Date of Internship	16 <sup>th</sup> November 2024
End Date of Internship	12 <sup>th</sup> February 2025
Total Duration	3 Months
Office Hour	9 AM to 6 PM
Working Hour	9 Hours per Day
Working Days	5 Days
Holidays	Saturday Sunday

# CHAPTER 3: BACKGROUND STUDY AND LITERATURE REVIEW

#### 3.1. Background Study

Easy Access (P) Ltd. is a Web-based company that specializes in providing high-quality website design, development, and hosting services. Established with the mission to bring cutting-edge technology and creativity to the web development industry, the company has become a trusted name in Nepal's IT sector.

The company provides wide range of services including web design and development (Custom website design, e-commerce solutions, CMS-based development, and responsive design.), web hosting (Reliable web hosting services with fast loading speeds and high uptime.), SEO services to enhance website visibility and traffic, software solution and branding.

Easy Access operates within the growing IT sector of Nepal, which has witnessed a surge in demand for digital services. With businesses increasingly recognizing the importance of having a robust online presence, the demand for web development and IT solutions has grown significantly. The IT sector in Nepal is expected to continue growing, driven by technological advancements, digitalization, and a rising number of startups.

Laravel also includes a powerful routing system that allows you to define the URLs of your application and map them to specific controllers and actions. This makes it easy to create clean, readable URLs that are easy for users to understand and navigate. Laravel's views are written in PHP and use blade templates, which allow you to embed PHP code and logic directly in your HTML. This makes it easy to create dynamic, interactive views that can display data from the model and respond to user input.

Laravel's controllers handle HTTP requests and determine what actions to take based on the request method (e.g., GET, POST, PUT, DELETE) and the URL of the request. They can also pass data between the model and the view and render the appropriate view for the user (Rees, 2025). Laravel also includes an Eloquent ORM (Object-Relational Mapping) that allows you to work with your database using PHP objects. This makes it easy to query the database, create and update records, and perform other common database operations without having to write raw SQL queries (Stauffer, 2025).

#### 3.2. Literature Review

The internship at Easy Access Nepal involved backend development for projects such as the Digital Profile and eHIMS (Electronic Health Information Management System) websites. These platforms required efficient data handling, dynamic user interaction, and robust backend processing. The Laravel framework was utilized for backend development, complemented by technologies like jQuery, Ajax, and JavaScript for frontend interactivity.

A review of relevant literature and similar systems highlights the importance of reliable backend operations in ensuring data integrity, application security, and effective communication between the client interface and the database. Frameworks like Laravel are widely adopted in the development community due to their modular architecture, built-in security mechanisms, and support for object-relational mapping (ORM) through Eloquent, which promotes clean and maintainable code structures (Rees, 2025).

To achieve responsive and dynamic user interfaces, jQuery and Ajax were employed extensively. jQuery facilitated DOM manipulation, event handling, and animations, simplifying the implementation of interactive frontend components. Ajax enabled asynchronous communication between the frontend and backend, allowing for real-time data updates without full page reloads. This technique significantly enhanced user experience by increasing application responsiveness and reducing latency. In systems such as the Digital Profile project, Ajax was applied for dynamic form submissions and live content updates, resulting in smoother navigation and improved user engagement. Existing research supports the effectiveness of asynchronous data loading in enhancing usability and satisfaction in web applications (Bean, 2015).

Security and data protection were of particular importance in the eHIMS system, which handled sensitive health-related information. Laravel's comprehensive security features—including input validation, data sanitization, and protection against SQL Injection and Cross-Site Scripting (XSS)—were used to safeguard user data (Otwell, 2025). Implementation of Laravel's built-in validation rules ensured that data entered into the system met defined standards and minimized risks associated with invalid or malicious input. This approach reduced the need for writing raw SQL queries, minimizing the risk of SQL Injection and enhancing overall application security. Furthermore, using Eloquent ORM contributed to cleaner, more maintainable code, which is critical for long-term system sustainability (Rees, 2025).

## **CHAPTER 4: INTERNSHIP ACTIVITIES**

#### 4.1. Roles and Responsibilities

Being a Web Development intern at Easy Access P. Ltd., different roles and responsibilities were provided:

- Understand the organization's workflow and project management.
- Assist in developing frontend and backend features using Laravel and jQuery.
- Developing and Maintaining Backend Systems.
- Implementing Dynamic Frontend Features.
- Troubleshooting and debugging.
- Collaborating with Cross-functional Teams.
- Learning and Skill Development.

## 4.2. Weekly Log

The internship period at Easy Access P. Ltd. was of 12 weeks. The detailed weekly logs during the internship tenure are listed as follows:

Week 1 (Nov 18 - Nov 22):

Table 4. 1: Weekly Log 1

S.N.	Tasks	Activities
1	Read Existing project developed	Understand the working model and process
	by senior developer.	of project.
2	Conducted requirement analysis	Research and gather resources for project.
3	Learnt about tools and techniques	Understand basic techniques and tools to create Laravel application.
4	Gained familiarity with Laravel	Focused on understanding MVC pattern to
	framework.	develop project.

# Week 2 (Nov 24 - Nov 29):

Table 4. 2: Weekly Log 2

S.N.	Tasks	Activities
1	Worked on Backend development	This includes the following:
		Create migration of patient module.
		Create Model Controller and Route
2	Worked on Frontend development	Create separate folder for patient module to
	to collaborate with backend	show on view page and create UI for such
		view.
3	Begin CRUD Operation	CRUD operations should be begun to handle
		each activity properly.

# Week 3 (Dec 2 - Dec 6):

Table 4. 3: Weekly Log 3

S.N.	Tasks	Activities
1	Implement Patient Module	This includes the following:
		Create patient from to store on database.
		In such from using ajax to handle few
		scenarios.
		Use select2 plugin for dropdown list.

# Week 4 (Dec 8 - Dec 13):

Table 4. 4: Weekly log 4

S.N.	Tasks	Activities
1	Test and Debug the Patient	This includes the following:
	module	Finish the CRUD operation for patient
		module.
		Test and debug and finalize the module for
		deployment.

# Week 5 (Dec 16 - Dec 20):

Table 4. 5: Weekly Log 5

S.N.	Tasks	Activities
1	Working on another Project	Working on Special New Born Kangaroo
	Kangaroo Register	Register for eHIMS system.
2	Working on database operations	<ul> <li>It includes:</li> <li>Create database table as kangarooregisters</li> <li>Test and analyze such database table using Laravel migration.</li> </ul>
3	Working on Frontend	Create a form for store information of SNBKR Register.

# Week 6 (Dec 23 - Dec 27):

Table 4. 6: Weekly Log 6

S.N.	Tasks	Activities
1	Implement Eloquent relations.	This includes the following:
		The detail of such table items can be
		fetched from its parent tables.
		Create relation between table using query
		builder and eloquent ORM.

# Week 7 (Dec 29 - Jan 3):

Table 4. 7: Weekly Log 7

S.N.	Tasks	Activities
1	Working on form handling and	This includes the following:
	exception handling	Create separate Request as
		KangarooRegisterRequest.
		Implement all input request as systems
		need to store Registers details on DB.

# Week 8 (Jan 5 - Jan 10):

Table 4. 8: Weekly Log 8

S.N.	Tasks	Activities
1	Worked on CRUD Operation	This includes the following:
		Worked on such modules edit operation
		such function created on controller to edit
		stored form
		Here also can be assigned role between
		table using eloquent ORM.

Week 9 (Jan 13 - Jan 17):

Table 4. 9: Weekly Log 9

S.N.	Tasks	Activities
1	Working on Restore Pannel	This includes the following:
		After edit operation done, I worked on its
		delete and restore operation.
		Create restore panel look like index.
		Handle operation to restore and delete
		stored operation.

Week 10 (Jan 5 - Jan 10):

Table 4. 10: Weekly Log 10

S.N.	Tasks	Activities
1	Working on Spreadsheet Library	This includes the following:
		Implement spreadsheet library to
		download such register on excel sheet
		properly.
		Using table tag to show all record shown
		properly.

# Week 11 (Jan 19 - Jan 24):

Table 4. 11: Weekly Log 11

S.N.	Tasks	Activities
1	Working on separate project	Working such activities there are few errors and mistakes so I started new project from start
2	Setup the project	<ul> <li>installed Laravel project using composer and setup it.</li> <li>Explore exception handling and make middleware to create authentication.</li> <li>Read Laravel documentation to explore new features.</li> </ul>

Week 12 (Jan 26 - Jan 31):

Table 4. 12: Weekly Log 12

S.N.	Tasks	Activities
1	Working on Frontend	<ul> <li>It includes:</li> <li>Create user registration and login page and handle it using middleware.</li> <li>Create master layout for show the activities on index after login.</li> </ul>
2	Working on Social Register	<ul> <li>Create one register which name is social register for hospital.</li> <li>Use select2 plugin and Ajax operations</li> <li>Handling all CRUD operations easily.</li> </ul>

#### **4.3. Description of the Project(s)**

This report provides an overview of the projects that were completed during my internship at EASY ACCESS Company.

Project 1: Digital Platform System

Project 2: E-commerce platform

Project 3: Electronic Health Information Management System(eHMIS)

Objective of Electronic Health Information Management System are following:

- Create Model and migration according to given data from schema.
- Create its database with using proper Eloquent ORM related with other models.
- Create SNBKR form to resister on database with some ajax operation.
- Here same form can be used for both create and edit with using Form facade.
- Create edit update and delete operation for handling operation on such register.
- Create trash register to show deleted item from register.
- Create Register to download on excel format using excel library on Laravel.

#### 4.4. Tasks / Activities Performed

The 12-week internship at Easy Access P. Ltd. Was a great learning experience. Likewise, the tasks/activities performed during the internship period are listed below:

#### • Development of the Patient Module for Digital Platform System

One of my first assignments was contributing to the **Patient Module** for a clinical Digital Platform System. This module is a critical component that collects and manages patient data to provide timely and accurate clinical decisions to healthcare providers. My role included:

- Designing user interfaces for patient data entry and management using frontend tools like HTML, CSS, and JavaScript.
- Writing backend logic in collaboration with the senior developers to ensure smooth data flow and integration with the DPS database.
- Implementing basic validation, form controls, and ensuring proper linkage between different patient data sections.

 Testing the module for usability and functionality, and resolving bugs identified during internal reviews.

This task allowed me to understand the importance of structured data in clinical decisionmaking and gave me experience in developing health-tech solutions with real-world implications.

#### Working on Special Newborn Kangaroo Register for eHIMS

Another important and one of the core tasks assigned to me was developing features for the **Special Newborn Kangaroo Register**, a part of the **eHIMS** (**electronic Health Information Management System**). This module is designed to record and monitor the care of low-birth-weight and premature infants through the Kangaroo Mother Care (KMC) approach. My responsibilities included:

- Collaborating with the development team to understand health protocols and converting them into digital forms and registries.
- Assisting in building the data entry interface and designing the register format in a way that matches national health standards.
- Integrating Ajax to create dependent dropdown for address fields and caste and caste-group and use select2 for multiselect.

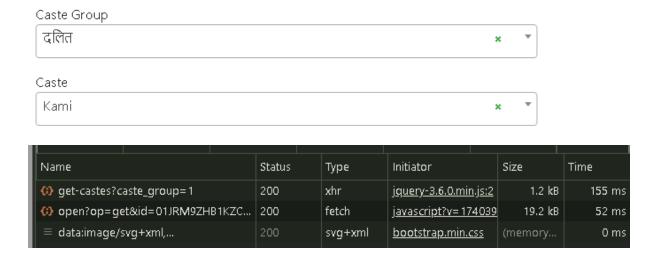


Figure 4. 1 Dependent Dropdown for caste and caste group of SNBKR Register.

- o Integrating spreadsheet library to download the register as an excel format.
- Mapping input fields with backend databases to ensure consistent and reliable data storage.

#### • Working on Social Register

One of my most significant contributions during the internship was the Social Register, a Laravel-based web application I developed independently from the ground up. This project allowed me to apply my full-stack development skills and follow best practices in web application architecture. Key tasks included:

- Start new project where Installed Laravel, configured the development environment, and set up database connections using .env.
- Implemented secure login and registration functionality using Laravel, ensuring proper user role management.
- Integrated Laravel Debug-bar and Laravel Telescope for monitoring performance, tracking queries, and debugging application behaviour.

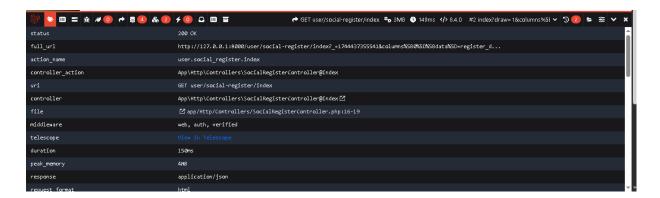


Figure 4. 2: Laravel Debug-bar.

 Designed and built Create, Read, Update, Delete operations for the Social Register module with validation, pagination, and flash messaging implementing yazrabox data-table.

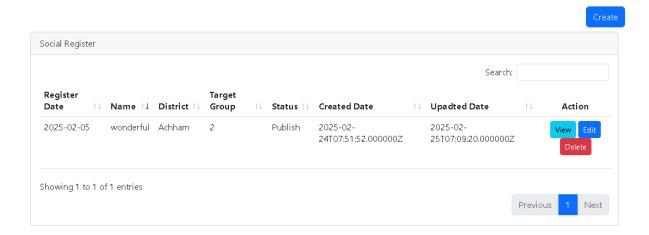


Figure 4. 3: Yazrabox Datatable.

o Implement jQuery Ajax operation to handle dependent dropdown for address field of such register. Ajax can be used because only small bits of data are exchanged with the server (instead of the full page), the website responds much faster, which improves performance and reduces wait times:

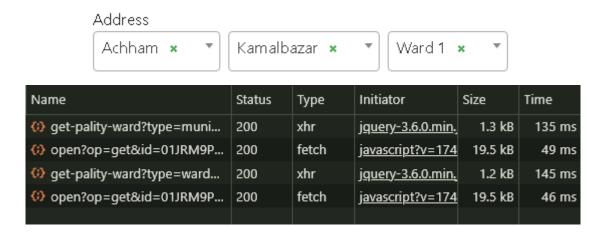


Figure 4. 4:Implementation of Ajax for dependent dropdown

Used Bootstrap and Blade templating to create a clean and user-friendly interface.

This project gives me enhanced experience about Laravel framework, implementing jQuery Ajax to handle operations dynamically.

# **CHAPTER 5: CONCLUSION AND LEARNING OUTCOMES**

#### 5.1. Conclusion

My internship at Easy Access was a significant milestone in my academic and professional journey. It provided me with firsthand exposure to the software development industry, bridging the gap between theoretical knowledge and practical application. Working within a dynamic and innovative environment allowed me to understand the complexities of real-world projects and the importance of teamwork, communication, and problem-solving in achieving project goals.

One of the most valuable aspects of this internship was the opportunity to collaborate with a team of experienced developers. Observing their workflow, coding practices, and problem-solving approaches gave me a deeper insight into industry standards and best practices. It also emphasized the importance of writing clean, maintainable, and scalable code. I was encouraged to ask questions, participate in discussions, and provide input on projects, which boosted my confidence and enhanced my ability to communicate technical ideas effectively.

The projects I worked on challenged me to think critically and apply my knowledge creatively. I was tasked with implementing new features, fixing bugs, and optimizing existing functionalities. These tasks not only improved my coding skills but also taught me how to analyse requirements, design solutions, and test them rigorously before deployment. Additionally, I learned the importance of meeting deadlines and managing time effectively in a professional setting.

Beyond technical skills, this internship enriched my soft skills, including teamwork, adaptability, and communication. Collaborating with cross-functional teams made me realize the significance of clear and concise communication, especially when discussing complex technical issues. I also learned to adapt to new tools, frameworks, and workflows quickly, demonstrating the importance of continuous learning in the tech industry.

Reflecting on this experience, I am truly grateful for the mentorship and guidance I received from my supervisors and colleagues at Easy Access. Their constructive feedback and encouragement played a crucial role in my growth and development. This internship has not only strengthened my technical foundation but also prepared me for future challenges in my career. I am confident that the skills and experiences gained during this internship will be instrumental as I pursue my career in software development.

#### 5.2. Learning Outcome

The internship at Easy Access was an exceptional learning experience that equipped me with valuable technical and professional skills. One of the most significant learning outcomes was gaining hands-on experience in web application development using Laravel. I learned how to utilize Laravel's MVC architecture to build modern, efficient, and scalable web applications. This deepened my understanding of how the model, view, and controller layers interact, enabling me to design clean and maintainable code structures.

Working extensively with Eloquent ORM was another crucial aspect of my learning journey. It provided me with a practical understanding of how to manage database interactions using an object-oriented approach. I became proficient in creating complex queries, defining relationships between database tables, and implementing CRUD (Create, Read, Update, Delete) functionalities seamlessly. This experience enhanced my ability to work efficiently with MySQL databases while maintaining data integrity and security.

The internship also exposed me to essential development tools such as Composer, Git, and Homestead. I learned how to use Composer to manage dependencies and streamline the installation of third-party packages, enhancing my productivity. Using Git for version control taught me how to track changes, manage branches, and collaborate effectively with other developers. I gained hands-on experience with Git commands for committing changes, merging branches, and resolving conflicts, which are crucial skills for any software developer.

Setting up a local development environment using Homestead improved my workflow and allowed me to simulate production-like conditions. This experience taught me the importance of maintaining consistent environments across development, testing, and deployment stages.

In addition to technical skills, the internship helped me develop essential soft skills. I learned how to effectively communicate complex technical concepts to team members with varying levels of technical expertise. Working in a collaborative environment improved my teamwork skills, as I frequently participated in brainstorming sessions, and code reviews. These interactions taught me how to accept constructive feedback and use it to enhance my work quality.

# References

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Stauffer, M. (2025). Laravel: Up and Running. Nepal: O'Reilly Media.

# **Appendices**

# A Complete Electronic Health Management Information System (eHMIS)

eHMIS, also referred to as the Electronic Health Recording System (EHRs), facilitate streamlined data management, comprehensive reporting, and real-time monitoring of health services.

Start Now

Figure: Front Page of eHIMS.

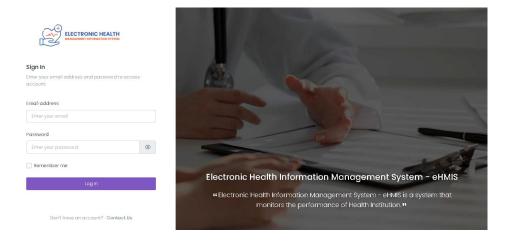


Figure: Administers Login page.

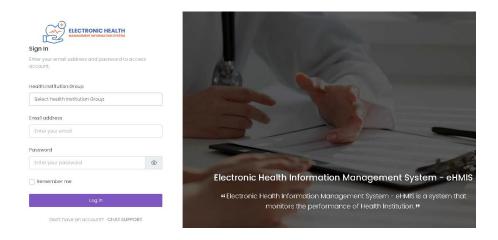


Figure: Auth Login Page.

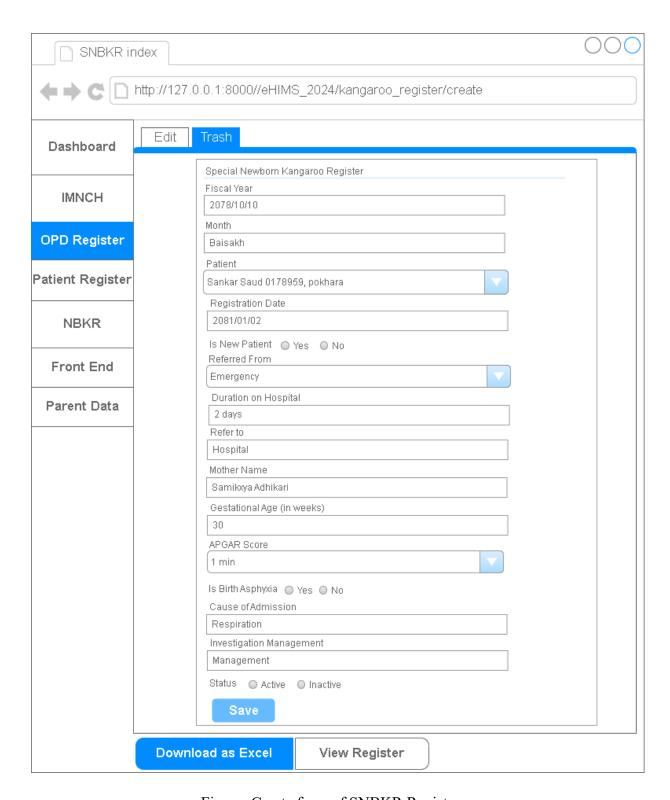


Figure: Create from of SNBKR Register.



Figure: Index page of SNBKR Register

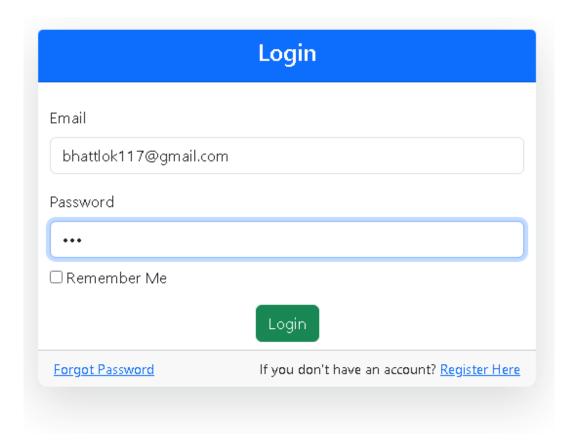


Figure: Login Page for Social Register.

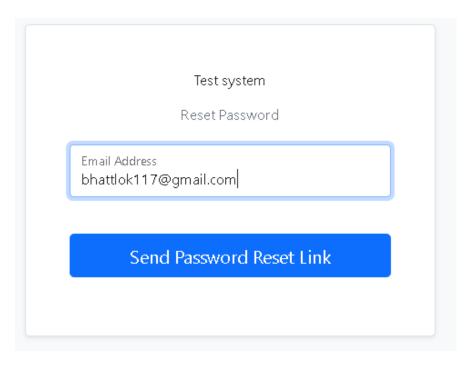


Figure: Forgot Password

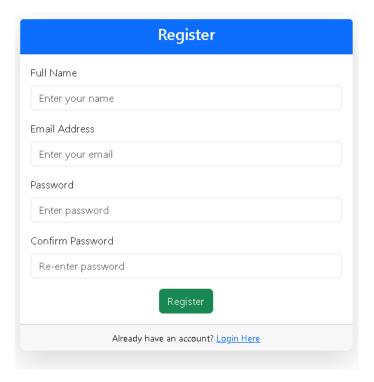


Figure: Registration Page for Social Register.

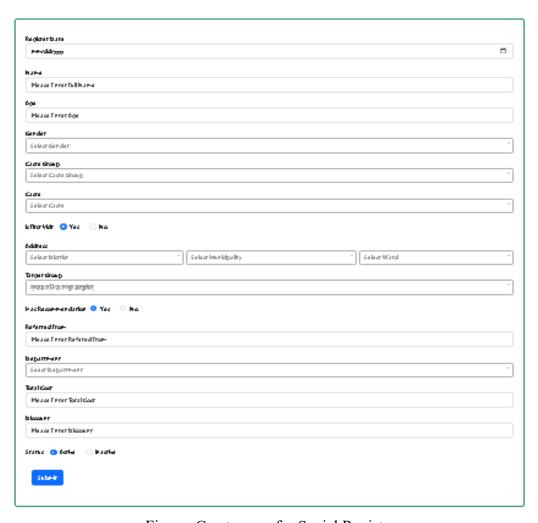


Figure: Create page for Social Register.