

NEPALGUNJ CAMPUS AND MANAGEMENT TECHNOLOGY

Tribhuvan University

Humanities and Social Sciences



PHP SOFTWARE DEVELOPER

At

EAGLE EYE IT SERVICE PVT. LTD.

INTERNSHIP WORK REPORT

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The internship opportunity I had with Eagle Eye IT Service Pvt. Ltd. was a great chance for learning and professional development. I did not only learn Programming but also got familiar with best industrial practices during my internship period. Therefore, I consider myself as a very lucky individual as I was provided with an opportunity to be a part of it.

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Yours Sincerely

Manoj
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ABSTRACT

This report will provide an in-depth insight into my PHP Programming Language internship experience at Eagle Eye IT Service Pvt. Ltd. and it will begin with a brief introduction of the organization and project. This report explored what I learnt during my internship on Web Technology, Java, C, C++ and Cloud Computing. The majority of my internship work was dedicated to many types of programming language and cloud based computing of various web applications.

Different languages like PHP, HTML, CSS, JS e.t.c Programming Framework were used. This report is focused on the work that is done during the internship. This report has helped me to gain more understanding about Programming Language and cloud services and its importance in today's world. This report also describes my experiences during my internship period at **Eagle Eye IT Service Pvt. Ltd.** starting from **Oct 15, 2022 to Jan 20, 2023**. This internship report contains an overview of the internship company and the activities, tasks and projects that I have worked on during my internship period. Writing this report, I also will describe and reflect my learning objectives and personal goals that I have set during my internship period.

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CHAPTER I

INTRODUCTION

1.1 Introduction

This report presents information about internships done about Programming at Eagle Eye IT Service Pvt. Ltd. During internship tasks related to Software Develop and cloud computing were done. Currently lots of organizations are compelled to invest huge amounts of money in data security and change their old working system. They need separate technical human resources to take care of their system; it has become an expensive task for companies. The concept of virtualization and cloud computing helps organizations to store data securely at reasonable cost. This internship report presents information about Software Develop, cloud computing and also presents methods of doing Programing, benefits of Software Develop.

1.2 Problem Statement

There are lots of Problems in the Programming field. We need to give more time to program. We face many types of errors we can face for a long time to solve errors. The programming sectors are researchable platform. It can take time to update our knowledge.

There are lots of challenges and opportunities in the IT industry and Cloud Computing services in Nepal. Some of the Challenges of the IT industry are as follows:

- Lack of knowledge in Programming Language
- Lack of professional and expertise in the sector.
- Changing customer's demand and requirements
- Lack of proper external environment.
- Maintaining Quality of service.
- Lack of Capital.

□

1.3 Objective

As a student of Information Technology I was interested in the Programming and Networking field. The objective of the internship was to fulfill the partial requirement of internship as designed by TU for my Bachelor degree (BCA). But this was not only the objective of mine behind this internship. During my time in the internship I wanted to actively participate to fulfill the company's goals and objectives applying the knowledge I gained during my education. Some of the general objectives of mine from this internship are:

- To understand the professional environment, functioning and working conditions of an organization.
- To learn how to deal with the real time challenges.
- To learn about data virtualization and cloud computing
- To sharpen my communication skills.
- To find the career advancement opportunity.
- To create a network among the organizations and their clients.
- To make the use of code to develop software.

1.4 Scope and Limitation

Nowadays the world is mostly using Technology Anywhere and we have to learn about it. The Technology is easy to use and it is a chip anyone can use easily. Every developed country is using technology in any type of working station. We can get the opportunities using anytime anywhere.

There are many opportunities in the IT industry and Cloud Computing.

Some of the opportunities of IT Sector and Cloud are as follows:

- Trade capital expense for variable expense.
- Catch the opportunities in online social media.
- Anytime, anywhere, anyone can access the data.
- Fast and easy to use and access.
- Benefit from massive economies of scale
- Increase speed and agility
- Global Access

Similarly, it's also a more dangerous thing. It's easy for anyone to access data who knows our personal details so it is also harmful. There is an increase in theft and fraud. Some Limitations are as given below :

- Pornography
- Fraud
- Online Theft
- Personal Data publish.
- BlackMail.

1.5 Report Organization

There are many types of Software companies that have established it better for us. Where the companies are providing IT service to their customers in any issue in Technology or Social media. Many Organizations are changing their working follow in their working system. Some are using third party software and some companies can create their own system. They can deal with software companies to develop software through their own requirements.

The organization has any mistake or if their system or their own software have any problems they can contact Software companies or any other companies who can provide IT services. Similarly Both organizations can communicate with each other about Software and IT Services. Both can report to the Organization.

CHAPTER 2

Introduction to Organization

2.1 Organization Details

The company Eagle Eye IT Service Pvt. Ltd was suggested by myself as I was interested in PHP Programming in which I dropped my CV via Email and ,Then I attended multiple interviews which was taken by company's Operational manager and Project manager and soon after the success of the interview I joined the Eagle Eye IT Service team without wasting my time and started my dream intern.

Eagle Eye IT Service Pvt. Ltd is located at Newroad(opposite Buddhagumba) Nepalgunj Banke, Nepal. I was selected as a Technical Support and I also worked as Technical Support at the starting of my internship period. After few Month according companies rules and my best performance can helped to change my position and i was selected as a Junior PHP Developer It is my Dream and I also worked as a PHP Junior Developer which was under direct supervision of Office PHP Senior Software Developer Mr. Hiramani Pun (www.hiramanipun.com.np) and Mr.PrakashChaudhary (www.chaudharyprakash.com.np).

The duration of my internship was three months from Oct 15, 2022 to Jan 20, 2023. During my internship in Eagle Eye IT Service Pvt. Ltd I worked on different features of softwares and learned various approaches to handling and troubleshooting customers problems and Programming error solving.

Some of the task I worked on during my internship were:

- ☐ Learn about different cloud services and Features of Software like:
 - ✓ API (application programming interface)
 - ✓ GIT Lab
 - ✓ EC2(Elastic Compute Cloud)
 - ✓ DynamoDB and RDS(Database service of AWS)

- ✓ S3(Simple Storage Service)
- ✓ EBS(Elastic Beanstalk)
- ✓ API Gateway.

□

2.2 Organizational Hierarchy

Here is a typical software company organization hierarchy, starting from the top and moving down:

1. CEO (Chief Executive Officer): The highest-ranking executive who sets the overall strategic direction and vision for the company.
2. Board of Directors: A group of individuals who oversee the CEO and provide guidance and support for the company's operations.
3. CTO (Chief Technology Officer): Responsible for the overall technology strategy and development of the company's products.
4. COO (Chief Operating Officer): Oversees day-to-day operations, including production, marketing, and customer service.
5. CFO (Chief Financial Officer): Manages the financial operations of the company, including budgeting, forecasting, and financial reporting.
6. VP (Vice President): Leads a specific area of the company, such as marketing, sales, or engineering.
7. Director: Manages a specific team within a department.
8. Manager: Oversees the day-to-day operations of a specific team, including assigning tasks and managing team members.
9. Engineer/Developer: Responsible for writing and testing code, as well as implementing features and fixing bugs.
10. QA (Quality Assurance) Engineer: Tests software to ensure that it meets quality standards and is free of defects.
11. Designer: Creates the visual and user interface design of the company's products.
12. Technical Writer: Writes documentation and instructional materials to help users understand and use the company's products.
13. Support/Service Representative: Provides customer support and assistance with product-related issues.

2.3 Working Domains of Organization

A software company can have various working domains depending on the size, structure, and focus of the organization. However, here are some common working domains of a software company:

1. **Software Development:** This domain involves the creation, design, and development of software products.
2. **Quality Assurance and Testing:** This domain is responsible for ensuring that software products meet quality standards and are free from bugs and defects.
3. **Information Technology:** This domain involves the development, implementation, and maintenance of the organization's technology infrastructure and systems.
4. **Technical Support:** This domain is responsible for providing technical support and assistance to customers with product-related issues.
5. **Product Management:** This domain is responsible for managing the lifecycle of software products, from development to launch and ongoing maintenance.
6. **Sales and Marketing:** This domain is responsible for promoting and selling software products to customers.
7. **User Experience and Design:** This domain involves the creation of user-friendly and visually appealing interfaces for software products.
8. **Data Science and Analytics:** This domain involves the use of data to improve software products and provide insights for decision-making.
9. **Research and Development:** This domain is responsible for developing new software products and technologies, and improving existing ones.
10. **Project Management:** This domain involves the planning, coordination, and execution of software development projects.

2.4 Description of Intern Department/Unit

The Intern Department/Unit in a software company is a dedicated unit that focuses on providing internship opportunities to students or individuals who want to gain practical experience in the field of software development.

The main function of the Intern Department/Unit is to design, implement, and manage internship programs that offer valuable learning experiences for interns while also providing tangible benefits to the software company. This includes creating internship job descriptions, recruiting interns, managing the selection process, and providing training and support for interns during their time at the company.

Interns in the software company's Intern Department/Unit may work on a variety of tasks and projects, depending on their level of skill and experience. They may assist with software development projects, testing and quality assurance, data analysis, technical support, and other tasks as needed. They may also have opportunities to collaborate with other teams within the software company and gain exposure to various aspects of the software development process.

CHAPTER III

Background Study and Literature Review / Related Works

3.1 Background Study

Software companies are organizations that develop and sell software products and services to businesses, organizations, and consumers. These companies can range from small startups to large multinational corporations.

Software companies are typically led by a management team that oversees various departments, such as software development, quality assurance, marketing, and sales. They use project management methodologies, such as Agile or Waterfall, to manage software development projects and ensure that products are delivered on time and within budget.

3.2 Literature Review

There is a vast body of literature on software companies, covering topics such as software development methodologies, project management, software engineering, entrepreneurship, innovation, and market strategies. Here are some examples of related works and studies:

1. "The Lean Startup" by Eric Ries - This book discusses the principles of lean startup methodology, which focuses on rapid iteration, experimentation, and customer feedback to develop innovative software products.
2. "The Innovator's Dilemma" by Clayton Christensen - This book explores the challenges that established companies face when trying to innovate and disrupt existing markets, and proposes strategies for overcoming these challenges.

Overall, these works and many others provide valuable insights and guidance for software companies looking to succeed in the competitive and ever-evolving software industry.

CHAPTER IV

Internship Activities

4.1 Roles and Responsibilities

Software companies typically have a range of roles and responsibilities that are necessary for developing and delivering high-quality software products and services. Here are some examples:

1. **Software Developers:** responsible for designing, coding, testing, and maintaining software applications using programming languages and tools.
2. **Project Managers:** responsible for planning, coordinating, and overseeing software development projects, including managing schedules, budgets, and resources.
3. **Quality Assurance Analysts:** responsible for testing software products to ensure they meet functional requirements, are free of defects, and are user-friendly.
4. **User Experience (UX) Designers:** responsible for designing software interfaces and experiences that are intuitive, engaging, and easy to use.
5. **Technical Writers:** responsible for creating technical documentation, including user manuals, help files, and technical specifications.
6. **Sales and Marketing Professionals:** responsible for promoting and selling software products and services to customers, including conducting market research, developing marketing strategies, and managing customer relationships.

Overall, the roles and responsibilities within a software company can vary depending on the size and structure of the organization, as well as the specific needs of the business. However, having a well-defined set of roles and responsibilities is critical for ensuring that software development projects are completed on time, within budget, and to the satisfaction of customers and stakeholders.

4.2 Weekly log (Technical Details of Activities)

A weekly log for technical activities in a software company might include the following details:

Day 1:

- Resolved a critical bug in the software product, which was causing crashes for users.
- Conducted code review for a colleague's feature development work, providing feedback on best practices and potential issues.
- Attended a team meeting to discuss progress on current projects and upcoming priorities.

Day 2:

- Worked on implementing a new feature for the software product, using the React.js library.
- Collaborated with UX designers to ensure that the feature design was consistent with user needs and overall product strategy.
- Participated in a company-wide training session on Agile software development methodologies.

Day 3:

- Conducted performance testing for the software product, using load testing tools to simulate high user traffic.
- Met with the project manager to discuss timelines and resource needs for upcoming development sprints.
- Reviewed industry news and trends, and shared insights with colleagues on potential impacts on the company's products and services.

Day 4:

- Participated in a code refactoring session, working with colleagues to streamline and optimize existing code for improved performance and maintainability.
- Worked on creating technical documentation for a recently completed software project, including user manuals and technical specifications.
- Provided technical support to a customer via email and phone, resolving an issue with the software product.

Day 5:

- Conducted a team retrospective meeting, reviewing progress and identifying areas for improvement in development processes and practices.
- Worked on personal development goals, including taking online courses in new programming languages and technologies.
- Attended a company social event, promoting team bonding and collaboration.

Overall, a weekly log for technical activities in a software company should include a mix of development work, collaboration with colleagues and stakeholders, and personal development and training activities. By maintaining a detailed log of activities, software professionals can track progress, identify areas for improvement, and demonstrate their contributions to the company's success.

4.3 Description of the Project(s) Involved During Interns

Interns in a software company may work on a range of projects, depending on their interests, skills, and the needs of the organization. Some examples of projects that interns may work on include:

1. Software development: Interns may work on developing software applications, tools, or features using a range of programming languages and frameworks. This could involve coding, testing, debugging, and collaborating with other developers.

2. Quality assurance: Interns may work on testing software products to ensure that they meet functional requirements, are free of defects, and are user-friendly. This could involve creating test plans, executing test cases, and reporting bugs.
3. User experience design: Interns may work on designing software interfaces and experiences that are intuitive, engaging, and easy to use. This could involve conducting user research, creating wireframes and mockups, and collaborating with developers and other stakeholders.
4. Technical writing: Interns may work on creating technical documentation, including user manuals, help files, and technical specifications. This could involve working with developers and other subject matter experts to understand technical details and translate them into user-friendly documentation.
5. Data analysis: Interns may work on analyzing data related to software products, user behavior, or market trends. This could involve using data analytics tools and techniques to extract insights and make recommendations for product development and marketing strategies.

Overall, intern projects in a software company are designed to provide hands-on experience and learning opportunities in software development and related fields. Interns may work individually or as part of a team, and will typically receive guidance and support from more experienced colleagues and mentors.

4.4 Tasks / Activities Performed

The Software development process started with the initial meeting with the group members and including me there were 5 members in my group (Mr. Kashiram Gautam (Manager) and Mr. Hiramani Pun(S. Software Developer), Mr. Prakash Chaudhary (S. Software Developer), Mr. Manoj (Software Developer), Bibek Gurung and Anil Thapa(Technical Support)). Then we divided the work for all 5 members according to the skills. As an Software developer I was assigned following tasks:

- Design Follow and submit to Mr. Prakash Chaudhary.
- Make use of S3 (Simple Storage Service) for web hosting and Versioning.

- Analysis of the requirement and create documentation for required API's.
- Create a required table in DynamoDB(No SQL database).
- Crud The tables in Yii PHP Framework.

Tasks and activities performed in a software company can vary depending on the specific role, department, and project. However, some common tasks and activities in a software company may include:

1. Software development: Designing, coding, testing, and deploying software applications and features using programming languages and development frameworks.
2. Quality assurance: Conducting testing activities to ensure that software products meet functional requirements, are free of defects, and are user-friendly. This can include creating test plans, executing test cases, and reporting and tracking bugs.
3. Technical support: Providing assistance to customers who are experiencing issues with software products, troubleshooting problems, and providing guidance on how to use software features.
4. User experience design: Conducting user research, creating wireframes and mockups, designing software interfaces and experiences that are intuitive, engaging, and easy to use.
5. Project management: Planning and managing software development projects, including creating project timelines, allocating resources, and tracking progress.
6. Technical writing: Creating technical documentation, including user manuals, help files, and technical specifications.
7. Data analysis: Analyzing data related to software products, user behavior, or market trends. This can involve using data analytics tools and techniques to extract insights and make recommendations for product development and marketing strategies.
8. Research and development: Exploring new technologies, software frameworks, and development methodologies to identify opportunities for innovation and improvement.

CHAPTER V

CONCLUSION

5.1 Conclusion

As this was my first work experience in the Programming Field and cloud computing field it was one of the great experiences for me and I learned and gained lots of practical as well as theoretical knowledge and that knowledge has really built my self-confidence up. I got the experience of real and professional work during my internship period. I learned a lot about Programming which was a completely new topic for me. And still there are lots of things that I have to improve to be better in this competitive and fast moving world of IT. My Internship at Eagle Eye IT Service Pvt. Ltd has pushed me to grow my career in Programming.

5.2 Learning Outcome

Three months of my internship in Eagle Eye IT Service Pvt. Ltd was amazing and I really enjoyed my internship period as I got a great opportunity to learn in Programming World and theoretically. I found out that there is a big difference in the college projects and the tasks and activities during the organization projects. In college we learn how to describe the work in projects, where in work I learnt how to implement them in reality. This internship was definitely an introduction to the field of actual work for me. I have learned to work in an organization and apply my knowledge into practice.

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