

**Tribhuvan University**

**Institute Of Science And Technology-(IOST)**

**Internship Report**

**Submitted to:**

Department of Computer Science and Information Technology

Bhairahawa Multiple Campus

In partial fulfilment of the requirements of Internship (CSC462)

Of

Bachelor of Science in Computer Science and Information Technology

**Submitted By:**

ShivCharan Prasad Barai

Symbol No:-25273/076

TU-Reg-No:-5-2-52-26-2019

**An Internship Report**

On

**E-Bidding System** at The Department of IT, Siddharthanagar Municipality, Rupandehi, Lumbini Province,

Bhairahawa

Submitted in partial fulfillment of the requirements of Internship (CSC462)

Of

Bachelor of Science in Computer Science and Information Technology

**Submitted To**

**Tribhuvan University**

Bhairahawa, Nepal

**Submitted by**

ShivCharan Prasad Barai

TU-Reg-No:-5-2-52-26-2019

Jun, 2024

I

Siddharthanagar Municipality

Office of Municipal Executive

Siddharthanagar, Rupandehi

Lumbini Province, Nepal

Ref.No

Date: 5th Jun, 2024

TO WHOM IT MAY CONCERN

This is to certify that Mr. ShivCharan Prasad Barai has completed his internship, at Siddharthanagar Municipality, Rupendehi, Lumbini Province, Nepal as an intern in IT Department of Siddharthanagar Municipality under the supervision of Mr. Tapan Pandey. His 10 week internship commenced in 11 September 2022 and concluded on 27 November 2022.

During his internship, he has demonstrated good skills with a self-motivated attitude to learn new things. His performance has been excellent and he has been able to remain on path to Complete the planned project successfully and on time.

We wish him all the best for his future endeavors.

……………………………….

Nab Raj Poudyal

**Chief Administrative Officer**

An Internship Report

On

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**Submitted by:**

ShivCharan Prasad Barai

TU-Reg. No:- 5-2-52-26-2019

Jun, 2024

Project Supervisor

Sunil Shah

Bhairahawa Multiple Campus

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Siddharthanagar Municipality

Rupandehi, Lumbini Province,

Bhairahawa

Tribhuvan University

Jun, 2022

**Letter of Recommendation**

I am honored to write this letter of recommendation for Mr. ShivCharan Prasad Barai. I have thoroughly looked over her work with us during her internship period. Her work with us has met the standards mentioned in this report. Mr. ShivCharan Prasad Barai is a great team member and has the competency and basic experience needed in the journey to become an IT officer in future.

As her internship work at the Department of Information Technology, Siddharthanagar Municipality, was done in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Information Technology. I hereby recommend this internship report done under my mentorship for the final evaluation.

………………………

Tapan Pandey

IT officer

Department of Information Technology,

Siddharthanagar Municipality

Rupandehi, Bhairahawa

IV



**Tribhuvan University**

**Institute Of Science and Technology**

**Bhairahawa Multiple Campus**

**Supervisor's Recommendation**

I hereby recommend this internship project prepared under my supervision by ShivCharan Prasad Barai in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Information Techanology is recommended for the final evaluation. I have thoroughly looked over the work he has done during her internship period.

………...............

SUPERVISOR

Sunil Shah

V



**Tribhuwan University**

**Institute Of Science and Technology**

**Bhairahawa Multiple Campus**

**LETTER OF APPROVAL**

This is to certify that this internship report prepared by ShivCharan Prasad Barai in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Information Technology has been evaluated.

In our opinion it is satisfactory in the scope and quality as an internship report for the required degree.

|  |  |
| --- | --- |
| **………………………………**  Mr.Anil Kumar Jha  **(Campus Chief)**  Bhairahawa Multiple Campus | |
| ………………………  Kushal Bhattarai  **( Supervisor )**  Bhairahawa Multiple Campus | ……………………………  Er. Sunil Kumar Shah  **(Co-ordinator)**  Bhairahawa Multiple Campus |
| …………………………..  **Internal Examiner**  Bhairahawa Multiple Campus | ….…………………..  **External Examiner**  IOST,Tribhuvan University |

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List of Abbreviations

IT: Information Technology

TU: Tribhuvan University

BSC.CSIT: Bachelor of Science in Computer Science and Infromation Technology

PPMO: PUBLIC PROCUREMENT MONITORING OFFICE

BOLPATRA NEPAL

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**Chapter-1: Introduction**

**1.1 Introduction**

"E-Bidding System" is the work performed by me during my internship period. It is to be linked with the help of Public Procurement Monitoring System (PPMO) system.

Public Procurement Monitoring System (PPMO) is the system which is used for bidding and auction related to government sectors, keeping the records of local registers are already done, and also for general registration and issuance of certificate. It has been assigned to manage and regulate bidding system.

PPMO is to ensure good governance in procurement system of the Public Entity that is transparent efficient and free of corruption with the use of information and communications technology also to be ensured for procurement through proper coordination between Public Entities and the related parties. The government has established as its support contractors unions and suppliers unions for the proper implementation of the Public Procurement Act, 2063 (B.S) and its amendments.

Public Procurement Monitoring Office (PPMO) was established as per the provisions made in the Public Procurement law of Nepal. The Public Procurement Act, 2063 (B.S) and Public Procurement Regulation, 2064 (B.S) has been enforced on 2063/09/30 and 2064/05/04 respectively. PPMO was established as an autonomous entity on 2063/09/30 (B.S.) and is situated in Buddhanagar, Kathmandu. The office has altogether has 51 staffs working under different divisions.

**1.2 Problem Statements**

- To identify the problems and constraints to keep all the record in system.

- To identify the problems and constraints to keep all the record in system.

- To identify the problems and constraints to keep all the record in system.

- To identify the problems and mistakes while keeping the record in system.

**1.3 Objectives**

- To be of the guiding body responsible for procurement policy formulation and the implementation and monitoring of effective public procurement system

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- Establish and maintain transparency, accountability, effectiveness, efficiency and economy along with non-discrimination and equality in public procurement proceedings of Nepal.

- Achieve maximum benefits from the public resources through economy and rational judgment.

- To reduce human efforts and maintain the record with accuracy in systematic way.

**1.4 Scope and Limitation**

**1.4.1 Scope**

- Improve the public procurement law implementation through system in field of public procurement.

- Develop and Issue the Standard Bidding Documents for Civil Works, Goods and Consultancy Services.

- Present an annual report to GoN reporting on the overall functioning of public procurement system.

- Organize public talks and respond and recommend results of implementation to the government for improvement and proper functioning of the public procurement system.

**1.4.2 Limitation**

- As it’s a web-based system, so user need an internet to perform the task online through the system for improvement and proper functioning of the public procurement system.

- Only the authorized person can run this system.

**1.5 Report Organization**

This report contains 5 chapters which are described below.

**Chapter 1** deals about introduction of the system. It answers, “what the system is?”, “what this system does?”. It also deals problem of statement what existing problem lags. Objectives of the project ,scope,and limitation in details.

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**Chapter 2** describe the detail information of the system and its hierarchy. It includes working domains of the organization and talks about the intern department or unit

**Chapter 3** is all about background study and literature review.

**Chapter 4** is about what roles and responsibilities participants played and their weekly log. It deals with the description of project which is involved during internship and the tasks or activities performed while doing this project.

**Chapter 5** describes about conclusion and Learning Outcomes.

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**Chapter-2: Introduction to Organization**

**2.1 Organization Details**

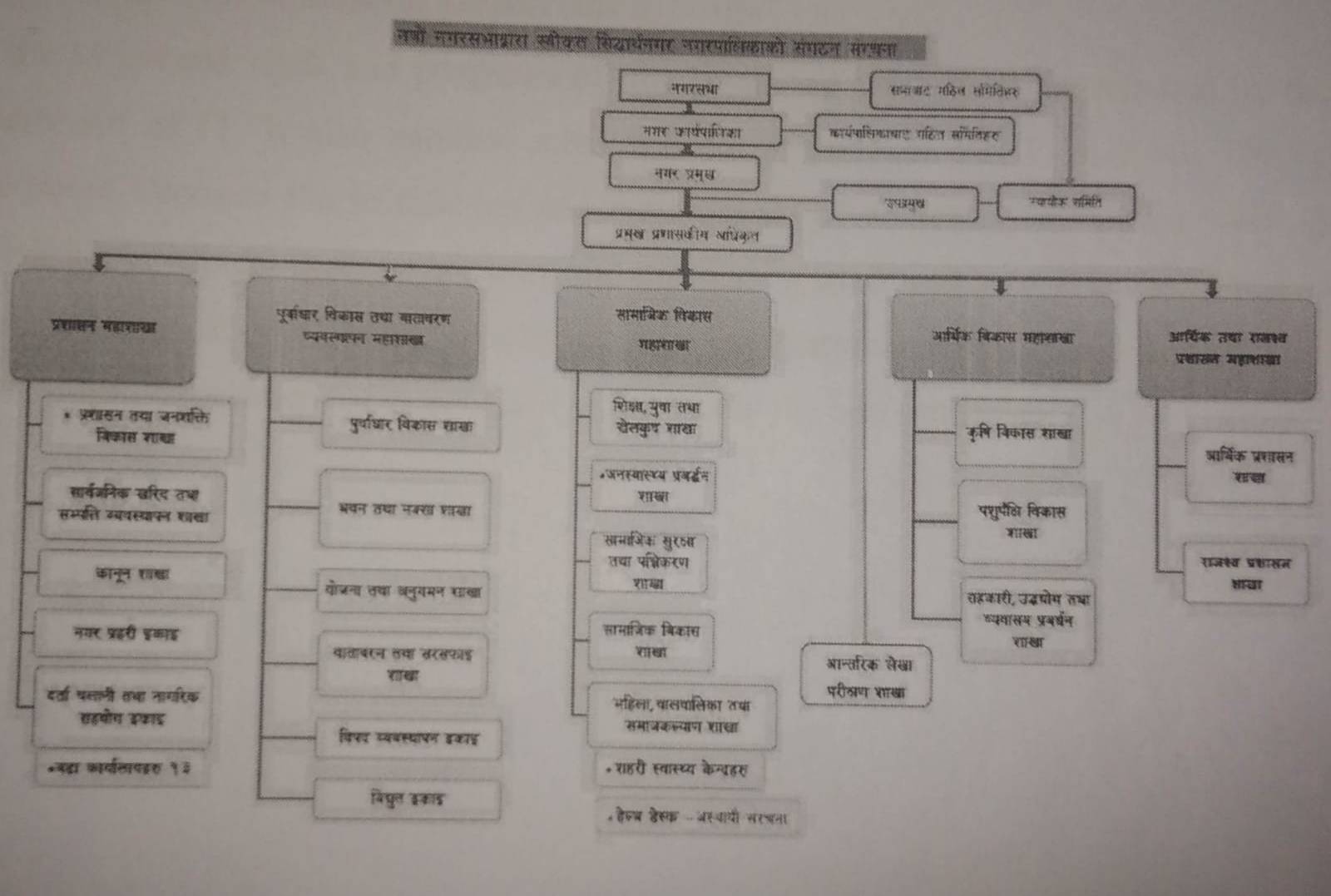
Siddharthanagar Municipality lies on the southern part of Rupandehi District of Lumbini Province which is also as administrative headquarter of Rupandehi District. The municipality is named after Siddhartha, the childhood name of Lord Gautam Buddha. It is one of the oldest city which is declared as municipality under the name of Bhairahawa Nagar Panchayat. The name of the municipality has been changed from Bhairahawa to Siddharthanagar since 2033 B.S. Divided into 13 wards, the municipality is bounded on the east by Omsatiya and Rohini Rural Municipality, on the west by Mayadevi Rural Municipality, on the north by Omsatiya and Mayadevi Rural Municipality and on the south by Sunauli (Maharajgunj District, India).

In local level, there has a mayor and a deputy mayor which are elected by the people. Apart from that, chief administrative officer which works as a Head Administrator. Under that, it has different sections where different administrative works are carried out. In IT related work and programs of municipality, there is an IT head who is responsible for all the IT related works. Also, there are some IT officers who work under the IT head. All the IT related work, development of software as well as development of different types of software are carried out by the IT department. The IT department is responsible for the development of different software which is used in different departments of municipality to carry out administrative work. It coordinates with all the different departments of municipality to carry out the best outcomes.

Siddharthnagar Municipality is basically responsible for supervision,guarding and securing the cleanliness of the public places,hotels,restaurants,dining rooms,tea rooms,baths,cinemas,etc,which are used by the public .Also Guarding the sanitation of food and drink which are used by public and maintenance of the water well and springd according to the health regulations.Helping government personnel in enforcement of their program of the prevention of cummicable disease of humans and animals.Examination of the health and technical ability of workers ,servants and occupation such as banker,servants,nurse,cleanser,drivers.buggy riders,porters,milksellers and all other food sellers and other occupations.

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**1.1 Organization Hierarchy**



**Figure 1: Organization Hierarchy**

**2.2 Working domains of Organization**

The organization has a mayor and a deputy mayor which are elected from the people. Then after, chief administrator officer which works as a Head Administrator. Under that, it consists of 5 major department. Information Technology is a small unit of social development sector where all the IT related works are carried out.

**2.3 Description of Intern Department/Unit**

All the IT related work and programs of municipal ward level are handled by the Department of IT. It also handles online system of national and local level. The IT department oversees the internal works and handles the problems related to the system that affects different types of software and hardware related problems. It ensures the best use of systems at local level, provincial and national level. It coordinates with different unit/department of municipality to carry out the best outcomes.

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**Chapter 3: Background Study and Literature Review**

**3.1 Background study**

The Government of Nepal (GoN), like most governments around the world, is the largest buyer of goods, services and works in the country. Some 60 to 70 % of the annual national budget goes to procurement. Hence public procurement plays a critical role in the economy and is an important factor in economic growth. Thus, Government of Nepal has promulgated Public Procurement Act (PPA) and Regulation (PPR) in 2007 to make the procurement system transparent, fair, competitive, and efficient. With the rapid development and expansion of ICT, Government of Nepal has adopted an e-Government procurement system and has established a Public Procurement Monitoring Office (PPMO) as a nodal agency to govern it at a national level.

National e-Government Procurement (e-GP) portal (https://www.bolpatra.gov.np) of the Government of Nepal is used by government agencies, and the Public Procurement Monitoring Office (PPMO) under the Office of the Prime Minister and Council of Ministers. The e-GP system provides an on-line platform to carry out the procurement of goods, works, and services required by the government agencies. The e-GP system aims to enhance the effectiveness of public procurement, reduce the procurement cycle, and improve the transparency and accountability of the procurement process. It also helps in reducing the costs of conducting services and bidders to submit their bids online.

The e-GP system consists of various components of public procurement including e-bidding, online registration of bidders, publication of notices, contract management, e-Catalogue, online bid security, and payment. The e-GP system has been implemented in different phases and is being used by various government agencies. The system is expected to bring about a significant improvement in the public procurement process by making it more transparent, efficient, and accountable. The e-GP system is also expected to help in reducing corruption and improving the quality of goods, works, and services procured by the government. The e-GP system is also expected to help in reducing the cost of procurement and improving the efficiency of the procurement process. The e-GP system is also expected to help in improving the quality of goods, works, and services procured by the government.

Public Procurement Monitoring Office (PPMO) was established as per the provision made by the Public Procurement Act, 2063 (B.S.) and Regulation. The Public Procurement Act, 2063 (B.S.) and Public Procurement Regulation, 2064 (B.S.) have been enforced on 2063/09/30 (B.S.) and 2064/5/03 (B.S.) respectively.

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**2.1 Literature Review**

Public Procurement Monitoring Office (PPMO) has the objective to establish a consistent e-Government Procurement (e-GP) system for the entire government of Nepal. The e-GP system will be used by all government agencies for procurement of goods, works and services, using a single web portal. The e-GP system is a single web-based portal which will provide a complete procurement lifecycle and record management system.

The system will be used by all Ministries, Departments, Divisions, Districts, and Local Government Agencies (LGA) for procurement of goods, works and services. The e-GP system is expected to be the key tool for improving governance and reducing corruption in public procurement. The e-GP system will provide a single point of access to all public procurement activities in the country. The e-GP system will provide a single point of access to all public procurement activities in the country. The e-GP system will provide a single point of access to all public procurement activities in the country.

Phase I: e-Administration System: Phase I has been rolled out to cover 20% of procuring entities e-Submission process which includes: Annual Procurement Plan (APP), Procurement Decision, Invitation of Bids, Bid Submission, Bid Opening, Bid Evaluation, and Contract Award.

Phase II: Full-fledged e-GP system: Covering all aspects of public procurement lifecycle - Registration, Procurement Planning, Bid Document Preparation, e-Tendering, e-Evaluation, e-Contract Management, e-Payment, and e-Dispute Resolution. The PPMO and Banking interface, is limited in scope. Phase II will provide a complete solution expanding to all procurement processing entities for their public procurement activities.

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**Chapter 4: Internship Activities**

**4.1 Rules and Responsibilities**

My responsibilities in this project was to Develop and Issue the Standard Bidding Documents for Civil Works, Goods and Consultancy.

The tasks regarding bid is evaluated by reviewing all aspects of public procurement lifecycle risk. PUBLIC PROCUREMENT MONITORING SYSTEM (PPMO) has been used to manage and regulate public procurement during my internship period. Organizations using technology to perform and improve the desired project. PUBLIC PROCUREMENT MONITORING SYSTEM performance and reduce the risk of project failure. It is the system provided by (PPMO). As a result, I was able to identify and address the issues that have compromised the standard of the records and information which reduce human performance and review the record in systematic way.

**4.2 Tasks/Activities Performed**

• Working on Ms excel.

• Troubleshooting the hardware and software problems.

• Printing and scanning the documents.

• Gathering information about the required documents for the registration.

• Verifying the details of the contractor in the system as well as in the documents.

**4.3 Weekly Log**

The log summarize work activities for the week. It includes daily activities and explain assignments made during the internship; skills learned and problems encountered. It helps to identify the career choice and knowledge about the workplace environment and the career path. It also includes the information about the issues and problems that may influence career choice. The weekly log brings together the information.

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**Weekly Internship Log**

Name: ShivCharan Prasad Barai

Project: E-Bidding System

Week No: 1 Date: 11 April, 2024

Responsibilities:

* Get familiar with the organization and its working.
* Understanding the local level and the municipality hierarchy.

Activities:

* Communication with the intern department of the organization.
* Understanding the hierarchy and chain of command of the organization.

Observations:

* The organization was complex body with distinct departments.

Plan for Next Week:

* Understanding the working principles of organization.

Performance Appraisal by Mentor:

Mentor's Approval:

Name: Mr. Tanvir Pandey

Signature:

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**Weekly Internship Log**

Name: ShivCharan Prasad Barai

Project: E-Bidding System

Week No: 2 Date: 18 April, 2024

Responsibilities:

* Get familiar about the laws and policies of municipality.

Activities:

* Communication with different section member.
* Communication with member to understand the laws and policies of municipality.

Observations:

* The organization has followed good business ethics and has it well documented.

Plan for Next Week:

* Understand the software used in IT department of municipality.
* Get familiar with the official website of municipality.

Performance Appraisal by Mentor:

Mentor's Approval:

Name: Mr. Tapu B. Dudley

Signature:

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**Weekly Internship Log**

Name: ShivCharan Prasad Barai

Project: E-Bidding System

Week No: 3 Date: 25 April, 2024

Responsibilities:

* Understand the software used in IT department of municipality.
* Get familiar with the official website of the municipality.

Activities:

* Understanding the software and its functions with the permission of the members.
* Understanding the functions of the website with the help of mentor.

Observations:

* All the software that are used in departments of municipality are under the control of local and central governments.

Plan for Next Week:

* Troubleshooting the hardware and software related problems.

Performance Appraisal by Mentor:

Mentor's Approval:

Name: Mr. Tapan Pandey

Signature: 11

**Weekly Internship Log**

Name: ShivCharan Prasad Barai

Project: E-Bidding System

Week No: 4 Date: 9 May, 2024

Responsibilities:

* Troubleshooting the hardware and software related problems.

Activities:

* Solving the hardware issue which arises in pc, printer, scanner and other electronic devices.
* Installation of different software.

Observations:

* Able to troubleshoot the problems which comes while working.

Plan for Next Week:

* Nepali typing and preparing the documents using MS Word, MS Excel, MS PowerPoint.

Performance Appraisal by Mentor:

Mentor's Approval:

Name: Mr. Tapan Pandey

Signature:

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**Weekly Internship Log**

Name: ShivCharan Prasad Barai

Project: E-Bidding System

Week No: 5 Date: 16 May, 2024

Responsibilities:

* Nepali typing and preparing the documents using MSWord, MS Excel, MS PowerPoint.

Activities:

* Typing the documents using the different Nepali font and Nepali Unicode in MS Word, MS Excel, and MS PowerPoint.

Observations:

* All the documentations are done in Nepali languages in municipality.

Plan for Next Week:

* Detail learning about e-bidding system.

Performance Appraisal by Mentor:

Mentor's Approval:

Name: Mr. Tapan Pandey

Signature:

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**Weekly Internship Log**

Name: ShivCharan Prasad Barai

Project: E-Bidding System

Week No: 6 Date: 31 May, 2024

Responsibilities:

* Detail learning about e-bidding system.

Activities:

* Communication with the mentor related to the project.
* Gathering the detail information about project and listing out the important topics.

Observations:

* Working in this domain is a difficult job.

Plan for Next Week:

* Get familiar with the 'PPMO' system.
* Learning the methodology of online bidding in the system.

Performance Appraisal by Mentor:

Mentor's Approval:

Name: Mr. Tapan Pandey

Signature:

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**Weekly Internship Log**

Name: ShivCharan Prasad Barai

Project: E-Bidding System

Week No: 7 Date: 13 Jun, 2024

Responsibilities:

* Get familiar with the 'PPMO' system.
* Learning the methodology of online bidding in the system.

- Learning the methodology of online bidding in the system.

Activities:

* Understanding the system by communicating with the members.
* Using the system by performing the online bids.

Observations:

'PPMO' is the online system used to bid procurement of civil, goods, ration work electronically.

Plan for Next Week:

* Understanding the required documents for the registration.

Performance Appraisal by Mentor:

Mentor's Approval:

Name: Mr. Tapan Pandey

Signature:

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**Weekly Internship Log**

Name: ShivCharan Prasad Barai

Project: E-Bidding System

Week No: 9 Date: 20 Jun, 2024

Responsibilities:

* Understanding the required documents for the registration.

Activities:

* Gathering information about the required documents for the registration with the help of members.

Observations:

* Copy of bidders details i.e. vat registration firm, tax clearance of running year, construction registration firm, etc.
* Bidding document required for the procurement of bidding.

Plan for Next Week:

* Printing and scanning the documents.

Performance Appraisal by Mentor:

Mentor's Approval:

Name: Mr. Tapan Pandey

Signature:

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**Weekly Internship Log**

Name: ShivCharan Prasad Barai

Project: E-Bidding System

Week No: 9 Date: 20 Jun, 2024

Responsibilities:

* Printing and scanning the documents.

Activities:

* Verification of documents required for registration.
* Printing, scanning and entering the documents after its verification.

Observations:

* Documents get printed and scanned after its verification.
* Filling the document of the bidders in system either it is passed or not.

Performance Appraisal by Mentor:

Mentor's Approval:

Name: Mr. Tapan Pandey

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Chapter 5: Conclusion and Learning Outcomes**

**5.1 Conclusion**

Overall, this internship was a useful experience. I have gained new knowledge, skills and met new people. I achieved several of my learning goals, however for some the conditions did not permit. I got insight into professional practice. I learned the different facets of working within an organization. Related to my study I learned more about the techniques that are being introduced in field of information processing. There is still a lot to discover for me to develop.

The internship was also good to find out what my strengths and weaknesses are. This helped me to define what skills and knowledge I have to improve in the coming time. I am glad that my knowledge level of technology was sufficient to contribute fully and successfully to the project. This internship has given me new insights and motivation to pursue a career in information technology.

**5.2 Learning Outcomes**

After completing this internship, I have evaluated that I have learned the following important lessons:

- Understanding the local working environment and policies in details.

- Knowing the organizational level and the hierarchy within organizations.

- Ability to Develop and use the Standard Bidding Documents for Civil Works, Goods and Consultancy.

- Ability to Develop human resource and professionalism development plan for public sector.

- Understanding of lifelong learning processes through critical reflection.

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