

# **ST. XAVIER'S COLLEGE**

## **MAITIGHAR, KATHMANDU**

### **GUIDELINES FOR PREPARATION OF INTERSHIP REPORT**

#### **Introduction**

Internship report in this manual refers to a documented report of the process followed and the results of internship conducted by a student in fulfillment of the requirements in bachelor degree. These rules must be adhered strictly.

#### **Contents of Internship Report**

The Internship Report should contain the items as outlined below and is to be presented in the order as listed.

#### **Number of Copies to be submitted to the Department**

Three hard copies of the report are to be submitted to the Department after corrections done as suggested by guide/Department at any time when report submission is called by guide/Department. Students are suggested to bind the report with hard cover and print the cover in golden. A soft copy (pdf format) should also be submitted to Department in CD along with report.

#### **Requirements for Report Writing:**

Your report should meet following standards:

**Font Name:** Times New Roman

**Left Margin:** 1.5 inch

**Right Margin:** 1.25 inch

**Top Margin:** 1.25 inch

**Bottom Margin:** 1.25 inch

**Header and Footer:** 0.5 inch

**Line Spacing:** 1.5

**Paragraph Spacing:** 18 pt  
**Font Size:** 12 pt (for normal text)  
Follow following standard for headings

- 1. Heading1 (16 pt, Bold)**
- 1.1 Heading2 (14 pt, Bold)**
- 1.1.1 Heading3 (13 pt, Bold)**
- 1.1.1.1 Heading4 (12 pt, Bold)**

## **1. ARRANGEMENT OF CONTENTS:**

The sequence in which the project report material should be arranged and bound should be as follows:

1. Cover Page
2. Copy of Cover Page
3. Corporate/Company Recommendation Certificate
4. Certificate of Approval
5. Acknowledgment
6. Abstract
7. Table of Contents
8. List of Figures (if any)
9. List of Tables (if any)
10. List of Symbols (if any)
11. Abbreviations (if any)
12. Chapters
13. Appendices (if any)
14. References

*\* Students can add their own topics or sub-topics as per necessity.*

*\* Justify the report for clean look at both left and right side of page.*

*\*The level of English writing must be appropriate to the level of the Bachelor's degree. Normally, there should be no first-person references (e.g., I, we, us) in the report. If self reference is required, reference may be made to "the author" or "this study".*

## **2. BINDING SPECIFICATIONS:**

Students have to submit tape or spiral binding of the report to the department at the time of report submission for correction purpose. Students are suggested to bind the final draft of the report with hard cover and print the cover in golden.

## **3. PREPARATION FORMAT:**

**Cover Page** - A specimen copy of the Title page of the project report is given in **Specimen copy-1**.

**Copy of Cover Page** – A specimen copy of the copy of cover page of the project report is given in **Specimen copy-2**.

**Certificate of Approval** – A specimen copy of the Certificate of Approval of the project report is given **Specimen copy-3**.

**Acknowledgment**- A specimen copy of the Acknowledgment of the project report is given **Specimen copy-4**.

**Abstract** – It is a heart of the report. Abstract should be one-page synopsis of the project report and it must clearly give the overview of the project (Avoid unnecessary things in abstract)

**Table of Contents** – The table of contents should list all material following it as well as any material which precedes it. The title page and Certificate of approval will not find a place among the items listed in the Table of Contents but the page numbers of which are in lower case Roman letters. One and a half spacing should be adopted for typing the matter under this head.

**List of Figures** – The list should use exactly the same captions as they appear below the figures in the text. One and a half spacing should be adopted for typing the matter under this head.

**List of Tables** – The list should use exactly the same captions as they appear above the tables in the text. One and a half spacing should be adopted for typing the matter under this head.

**List of Symbols** - The list should provide the detail of the symbols used in the report. One and a half spacing should be adopted for typing the matter under this head.

**Abbreviations** – Abbreviation list should provide the details of the abbreviations used in the report in alphabetical order. One and a half spacing should be adopted or typing the matter under this head.

**Page numbering** - The preliminary parts (Acknowledgement, Abstract, Table of Contents, List of symbols, List of figures, List of Tables) are numbered in roman numerals (i, ii, etc). The first page of the first chapter (Introduction) onwards will be numbered in Arabic numerals 1 2 3 etc at the bottom, centered.

**Numbering sections, subsections, equations, figures etc.** - A word on numbering scheme used in the project is in order. It is common practice to use decimal numbering in the project. If the chapter number is 2, the section numbers will be 2.1,2.2, 2.3 etc. The subsections in section 2.2 will be numbered as 2.2.1, 2.2.2 etc. Unless essential, it is not necessary to use numbers to lower levels than three stages.

Similarly, it is useful and convenient to number the figures also chapter-wise. The figures in chapter 4 will be numbered as Figure 4.1: Figure Name, Figure 4.2: Figure Name etc. This helps you in assembling the figures and putting it in proper order. Similarly, the tables are also numbered as Table 4.1: Table Name, Table 4.2: Table Name etc. All figures and tables should have proper captions. Usually the figure captions are written below the figure and table captions on top of the table. All figures should have proper description by legends, title of the axes and any other information to make the figures self explanatory.

The same numbering scheme can be used for equations also. Only thing to be remembered is that references to the figures are made like Figure 4.2: Figure Name, and equations as Eqn (5.8).

## **CHAPTER 1: INTRODUCTION**

### **1.1. Introduction to Internship**

### **1.2. Background**

### **1.3. Brief Introduction of Industry (software / hardware / web programming / network / tourism /hospitality management etc.)**

### **1.4. Brief Introduction of Organization**

#### **1.4.1 About Organization**

#### **1.4.2 Organization Rationale**

#### **1.4.3 Organization Hierarchy**

#### **1.4.4 Contact Details**

### **1.5. Objective and Scope of the project**

#### **1.5.1 Objective of Internship**

#### **1.5.2 Objective of the Project**

#### **1.5.3 Scope of the Project**

## **CHAPTER 2: METHODOLOGY**

### **2.1 Internship Placement Details**

#### **2.1.1 Organization Selection**

#### **2.1.2 Placement**

#### **2.1.3 Duration**

#### **2.1.4 Activities, Roles and Responsibilities**

### **2.2 Literature Review (should be related to the project with relevant references)**

### **2.3 Specific Problem Analysis**

#### **2.3.1 Understanding the Existing System**

#### **2.3.2 Development of Project Goals**

#### **2.3.3 Current System Architecture of the Project**

#### **2.3.4 Proposed System Architecture for the Project**

### **2.4 Management Strategy**

#### **2.4.1 Time and Cost Management Strategy**

#### **2.4.2 Data Collection Strategy**

##### **2.4.2.1 Interview**

##### **2.4.2.2 Questionnaire**

##### **2.4.2.3 Secondary Sources**

### **2.5 Project Schedule**

#### **2.5.1 Time Schedule**

#### **2.5.2 GANTT Chart**

## **CHAPTER 3: SOLUTION DESIGN**

### **3.1 Project Management Plan**

#### **3.1.1 System Analysis**

##### **3.1.1.1 Feasibility Study**

**3.1.1.1.1 Technical Feasibility**

**3.1.1.1.2 Economic Feasibility**

**3.1.1.1.3 Legal Feasibility**

**3.1.1.1.4 Operational Feasibility**

**3.1.1.1.5 Schedule Feasibility**

#### **3.1.2 System Design** (*Explain every diagram used here*)

##### **3.1.2.1 Algorithm of specific module (If any)**

##### **3.1.2.2 System Flow Chart**

##### **3.1.2.3 Context Diagram , DFD (Level 1, Level 2 and for major processes)**

**ER Diagram, Use Case Diagram, Class Diagram, System Sequence Diagram**

#### **3.1.3 Work Breakdown Structure**

#### **3.1.4 PERT**

#### **3.1.5 Alternative Solution (if any)**

### **3.2 Technical Requirements**

#### **3.2.1 Hardware Requirements**

#### **3.2.2 Software Requirements**

#### **3.3.3 Cross Platform Compatibility**

## **CHAPTER 4: IMPLEMENTATION STRATEGIES**

### **4.1 Testing Strategies** (*Test Case, Test Data, Test Results*)

### **4.2 Hardware Implementation**

### **4.3 Software Implementation**

## **CHAPTER 5: RESULT ANALYSIS**

### **5.1 Result** (*Screen shot of major deliverables and their explanation with short code snippet*)

### **5.2 Critical Analysis**

### **5.3 Limitations of the System/Organization**

### **5.2 Recommendation to the Organization**

### **5.3 Recommendation to the Internship Program**

## **CHAPTER 6: CONCLUSION**

## **REFERENCES/BIBLIOGRAPHY**

## **APPENDIX (If any)**

**SPECIMEN -1 (Cover Page- for Hard Cover)**  
**TRIBHUVAN UNIVERSITY**

**Faculty of Management**



**Internship Project Report**  
**on**  
**Project Name**  
**At**  
**Company Name**

For the partial fulfillment of the requirements of the degree of Bachelor in Information Management  
awarded by Tribhuvan University

**Under the supervision of**  
[Company/Org. Supervisor's Name]

**Submitted by**  
**Name of Student (T.U. Exam Roll No.)**  
**TU Registration No. : ( )**

**Submitted to**  
**ST. XAVIER'S COLLEGE**  
**Department of Computer Science**  
**Bachelor of Information Management**  
**Affiliated to Tribhuvan University**  
**Maitighar, Kathmandu, Nepal**  
**September 2018**



**SPECIMEN-2 (Copy of Cover Page- First page after hard cover)**

# **TRIBHUVAN UNIVERSITY**

**Faculty of Management**



**Internship Project Report**

**on**

**Project Name**

**At**

**Company Name**

For the partial fulfillment of the requirements of the degree of Bachelor in Information Management  
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**ST. XAVIER'S COLLEGE**

**Department of Computer Science**

**Bachelor of Information Management**

**Affiliated to Tribhuvan University**

**Maitighar, Kathmandu, Nepal**

**September 2018**





## SPECIMEN-3 (Certificate of Approval)



### ST. XAVIER'S COLLEGE

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### सेन्ट जेभियर्स कलेज

माईतीघर, काठमाडौं, नेपाल

पो.ब.नं. : ७४३७

फोन : ४२२१३६५, ४२४४६३६

ईमेल : ktm@stxc.edu.np

## CERTIFICATE OF APPROVAL

The undersigned certify that they have read and recommended to the Department of Computer Science for acceptance, an internship report entitled “.....” submitted by ..... (Students Name with TU exam Roll No.) for the partial fulfillment of the degree of Bachelor in Information Management.

.....  
(Company Supervisor's Name)  
Full designation  
Organization Name

.....  
External Examiner  
Tribhuvan University

.....  
Jeetendra Manandhar  
Head of the Department  
Department of Computer Science  
St. Xavier's College  
Maitighar, Kathmandu

## **SPECIMEN-4 (Acknowledgement Sample)**

### **ACKNOWLEDGEMENT**

It gives us immense pleasure to express our deepest sense of gratitude and sincere thanks to our highly respected and esteemed guide Er./Mr. ....(Supervisor name with full designation if any), for his/ her valuable guidance, encouragement and help for completing this work. His/ her useful suggestions for this whole work and co-operative behavior are sincerely acknowledged.

We would like to express our sincere thank to Er./Mr .....(with full designation and department), for giving us this opportunity to undertake this project. We would also like to thank Er./Mr. ....(Head of Department name with full designation) for whole hearted support.

We are also grateful to our teachers (teachers name with full designation) for their constant support and guidance.

At the end we would like to express our sincere thanks to all our friends and others who helped us directly or indirectly during this project work.

Name of Student

## **SPECIMEN-5 (Abstract Sample)**

### **ABSTRACT**

The protection of sensitive data that has to be transmitted on the computer network has been the most challenging issue in the field of computer. Cryptographic algorithms play a crucial role in the information society by providing protection from unauthorized access to sensitive data.

Although the security of encryption algorithm like Advanced Encryption Algorithm (AES) is beyond doubt, the limitations in computing power of a personal computer has caused the difficulties for encrypting the data file which is large in size. Hence this system allows encrypting the large files with the existing computational power of the personal computers by the use of grid based computation.

In this research work, a Grid-Based Cryptography application was studied and developed. It is an application that uses the computational resources and power of multiple personal computers in order to encrypt large files. The encryption standard Advanced Encryption Standard (AES) was used as the encryption. Grid nodes were generated for the computation. Grid manager splits the large text file into small file size and distributes them among the available grid nodes. Grid manager constantly checks for untreated file and failure of any grid node. After completing the task, the grid nodes return the cipher text back to the grid manager.

## **Appendix – 1: Table of Contents**

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### LIST OF SYMBOLS

$m$	Number of transmit antennas
$n$	Number of receive antennas
$h_{i,j}$	Channel matrix element
$\mathbf{H}$	Channel matrix
$\mathbf{y}$	Received signal
$\mathbf{x}$	Transmit signal vector
$P$	Total transmit power
Det	Determinant
$N$	Diversity order
$M$	Order of QAM modulation
$\mathbf{I}$	Identity matrix

## Appendix – 5: Abbreviations

### ABBREVIATIONS

AES	Advance Encryption Standard
DES	Data Encryption Standard
GF	Galois Field
QoS	Quality of Service
RMI	Remote Method Invocation
S – Box	Substitution Box
GTPBE	Grid and Thread Pool Based Cryptography



## **Appendix – 6: Format of Body Text**

### **CHAPTER 1: INTRODUCTION**

#### **1. 1 Background**

The protection of sensitive data that has to be transmitted on the computer network has been the most challenging issue in the field of computer. Cryptographic algorithms play a crucial role in the information society by providing protection from unauthorized access to sensitive data.

Although the security of encryption algorithm like Advanced Encryption Algorithm (AES) is beyond doubt, the limitations in computing power of a personal computer has caused the difficulties for encrypting the data file which is large in size. Hence this system allows encrypting the large files with the existing computational power of the personal computers by the use of grid-based computation.

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**References : Follow APA style guide for all citations and references.**