# DAV Institute of Engineering & Technology, Jalandhar

### **Department of Computer Science & Engineering**

# **Format for Report**

#### Title page

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#### **Chapter 1 Introduction**

Page 1 (so on onwards)

- 1.1 Introduction to Organization (should not exceed 3 pages including Figs.)
- 1.2 Introduction to Project
- 1.3 Project Category(Internet based, Application or System Development, Research based, Industry Automation, Network or System Administration)
- 1.4 Objectives
- 1.5 Problem Formulation
- 1.6 Identification/Reorganization of Need
- 1.7 Existing System
- 1.8 Proposed System
- 1.9 Unique Features of the System

### Chapter 2. Requirement Analysis and System Specification

- 2.1 Feasibility study (Technical, Economical, Operational)
- 2.2 Software Requirement Specification Document
  Software Requirement Specification Document which must include the
  following:(Data Requirement, Functional Requirement, Performance
  Requirement ,Dependability Requirement, Maintainability requirement,
  Security requirement, Look and feel requirement)
- 2.3 Validation
- 2.4 Expected hurdles
- 2.5 SDLC model to be used

#### **Chapter 3. System Design**

- 3.1 Design Approach (Function oriented or Object oriented)
- 3.2 Detail Design
- 3.3 System Design using various Structured analysis and design tools such as : DFD's, Data Dictionary, Structured charts, Flowcharts
- 3.4 User Interface Design
- 3.5 Database Design
  - 3.5.1 ER Diagrams
  - 3.5.2 Normalization
  - 3.5.3 Database Connection Controls and Strings
- 3.6 Methodology of system (How you would implement the system)

#### **Chapter 4. Implementation, Testing and Maintenance**

- 4.1 Introduction to Languages, IDE's, Tools and Technologies used for Implementation
- 4.2 Coding standards of Language used
- 4.3Testing Techniques and Test Plans (If applicable)

#### **Chapter 5. Results and Discussions**

- 5.1 User Interface Representation (Of Respective Project)
  - 5.1.1 Brief Description of Various Modules of the system
- 5.2 Snapshots of system with brief detail of each
- 5.3 Back Ends Representation (Database to be used)
  - 5.3.1 Snapshots of Database Tables with brief description

#### **Chapter 6. Conclusion and Future Scope**

References/Bibliography

## SPECIFICATIONS FOR TRAINING REPORT

- 1. Report shall be computer typed (English- British, Font -Times Roman, Size-12 point) and printed on A4 size paper.
- 2. The Report shall be hard bound with cover page in white color. The name of the candidate, degree (specifying the branch) ,roll no, session, year of submission, name of the University including college name shall be printed in black on the cover [Refer sample sheet (outer cover)]. But initially students should get their report printed in spiral bound form and after making the required changes as advised by examiner during internal viva they should submit the hard bound form of report to the same examiner.
- 3. The report shall be typed on one side only with double space with a margin 3.5 cm on the left, 2.5 cm on the top, and 1.25 cm on the right and at bottom.
- 4. In the report, the title page [Refer sample sheet (inner cover)] should be given first then the Certificate by the candidate and the supervisor(s) in sequence, followed by an abstract of the report (not exceeding 1500 words). This should be followed by the acknowledgment, list of figures/list of tables, notations/nomenclature, and then contents with page no.s
- 5. References and Bibliography should be included in report.
- 7. The diagrams should be printed on a light/white background, Tabular matter should be clearly arranged. Decimal point may be indicated by full stop(.)The caption for Figure must be given at the BOTTOM of the Fig. and Caption for the Table must be given at the TOP of the Table.
- 8. The graphs should be combined for the same parameters for proper comparison. Single graph should be avoided as far as possible.
- 9. Conclusions must not exceed more than two pages.
- 10. The report must consist of following chapters

Chapter 1- Introduction

Chapter 2- Requirement Analysis and System Specification

Chapter 3- System Design

Chapter 4- Implementation, Testing and Maintenance

Chapter 5-Results and Discussions

Chapter 6-Conclution and Future Scope

References

Appendix (if any)

Annexure-I, II, III
11. There should be separate final report for software training (3 Month) and industry training(3 Month).



# Project Title (24pt.)

## REPORT (14pt.)

# SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR SIX MONTH INDUSTRIAL TRAINING

at

Company Name (from \_\_\_\_\_ to \_\_\_\_\_

SUBMITTED BY

NAME (14pt) Branch Roll No. Univ. Roll No.

**DAVIET Logo** 

Department of Computer Science & Engineering DAV Institute of Engineering & Technology Jalandhar, India (14pt.)

# **Project Title**

## **REPORT**

# SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR SIX MONTH INDUSTRIAL TRAINING

at

Company Name (from \_\_\_\_\_ to \_\_\_\_\_)

SUBMITTED BY

Name (14pt)
Branch
Roll No.
Univ. Roll No.

Department of Computer Science & Engineering DAV Institute of Engineering & Technology Jalandhar, India (14pt.)

## **Abstract (Sample)**

Packet Filtering firewalls can use a database of rules to decide which packets will be allowed to move in and out and from one network onto another. However with the increase in size of rule list, it's very hard to manage and validate the rules, which can also increase the cost of rule lookup and that may add significantly to latency. Packet filtering is the one of the major contemporary firewall design techniques. Implementation of such packet filter using Binary Decision Diagram (BDD) gives more advantages in terms of memory usage and look up time. In the case of the list-based packet filter firewall where rules are checked one by one for each incoming packet, the time taken to decide on a packet is proportional to the number of rules. This work presents the study, design and implementation of a packet filter firewall using binary decision diagram which provides faster processing of packets while maintaining the integrity of the original security policy. Results on large number of packets show that for most-accept packets, and for most-reject packets there is manifold reduction in such comparisons when BDD-based approach is used over list-based with promotion approach.

The overall performance of a firewall is crucial in enforcing and administrating security, especially when the network is under attack. The continuous growth of the Internet, coupled with the increasing sophistication of the attacks, is placing stringent demands on firewall performance. In this work, a traffic-aware optimization framework is described to improve the operational cost of firewalls. Based on this framework a set of tools are designed that inspect and analyze both multidimensional firewall rules and traffic logs and construct the optimal equivalent firewall rules based on the observed traffic characteristics. The current work is the first to use traffic characteristics in firewall optimization. To evaluate the performance of current approach, a large set of firewall rules and traffic logs from a local LAN or at tens of enterprise networks managed by a Tier-1 service provider are evaluated. The evaluated results find these approaches very effective. In particular, current work has achieved more than 10 fold performance improvement by using the proposed traffic-aware firewall optimization.

### SAMPLE SHEET-ACKNOWLEDGEMENT

## **ACKNOWLEDGEMENT**

I am highly grateful to the Dr. Manoj Kumar, Principal, DAV Institute of Engineering & Technology, Jalandhar, for providing this opportunity to carry out the six month industrial training at
The constant guidance and encouragement received from Ms. Harpreet Kaur Bajaj, HoD Department of Computer Science & Engineering, DAVIET Jalandhar has been of great help in carrying out the project work and is acknowledged with reverential thanks.
I would like to express my gratitude to Mr./Ms, Assistant Professor Department of Computer Science & Engineering DAVIET Jalandhar for his stimulating guidance, continuous encouragement and supervision throughout the course of present work.
I would like to express a deep sense of gratitude and thanks profusely toDirector/CEO of Company ,. Without the wise counsel and able guidance, it would have been impossible to complete the report in this manner.
The help rendered by Mr./Ms, Designation(in company) for experimentation is greatly acknowledged.
I express gratitude to other faculty members of Computer Science & Engineering department of DAVIET for their intellectual support throughout the course of this work.
Name of the Student

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Note: The report of respective project should be as per prescribed format and in the same order though if some of the points are not applicable in regard with the concerned project, they might be omitted.

