# DEVELOPMENT OF PROTOTYPE WEB-BASED IPng ROUTER CONFIGURATION SYSTEM

QURRATUN AINI BINTI AKMAT

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

**BORANG PENGESAHAN STATUS TESIS**

JUDUL: DEVELOPMENT OF PROTOTYPE WEB-BASED IPng ROUTER CONFIGURATION SYSTEM

SESI PENGAJIAN: SEMESTER 2 (2008/2009)

Saya QURRATUN AINI BINTI AKMAT

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Tarikh : 02.07.2009

Tarikh : 2 JUL 09

CATATAN: * Tesis dimaksudkan sebagai Laporan Akhir Projek Sarjana Muda (PSM)
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2009

# DECLARATION

I hereby declare that this project report entitled

**Development Prototype of IPng Router Configuration System**

is written by me and is my own effort and that no part has been plagiarized without citations.

STUDENT : _____ Date: 02.07.09

(QURRATUN AINI BT AKMAT)

SUPERVISOR: _____ Date: 2 JUL 09

(EN. NAZRULAZHAR BIN HAJI BAHAMAN)

## DEDICATION

Specially dedicated to
my beloved parents, my siblings and my family, who have encouraged, guide and inspired me throughout my journey of education. Also I would like to dedicate this special thank to my friends and my colleagues.

## ACKNOWLEDGEMENTS

In the name of Allah,
Most Gracious and Most Merciful

Alhamdulillah with the effort and patience in taking all challenges, Project Sarjana Muda (PSM) was accomplished successfully.

I would like to give a special thanks to En. Nazrulazhar bin Bahaman as my supervisor and to others lecturer for their invaluable support and knowledge. All of their advices and guidance are so meaningful to me.

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**THANK YOU.**

# ABSTRACT

Prototype of Web-based IPng Router Configuration System is a web-based user interface (WBUI) design system that used for router configuration. It develops in HTML and PHP programming language which can be running in Operating System without any requirement. This prototype used to help especially the beginner users to configure router even if they had no experience in router configuration. This project is built for network that using IPv6 addresses. But this system not includes the entire Cisco Router configuration, just a several basic and popular commands. In this system, the connection between the router and the server is using TCP connection that is using TELNET. In way to gives the user clear about all the commands that used for each configuration, one interface used for one of the router configuration. User can see the command at the text area. One of the advantages of using this system is, it can be running anywhere and anytime as long as the server is connected with the router in intranet network environment.

# ABSTRAK

Prototaip sistem konfigurasi router IPng berasaskan web adalah reka bentuk sistem antaramuka pengguna yang digunakan untuk mengkonfigurasi router. Ia dibangunkan menggunakan bahasa pengaturcaraan HTML dan PHP yang mana boleh di akses dari sistem operasi tanpa apa-apa keperluan lain. Prototaip ini di gunakan untuk membantu khususnya pengguna baru untuk mengkonfigurasi router walaupun tanpa pengalaman didalam mengkonfigurasi router. Projek ini dibangunkan untuk rangkaian yang menggunakan alamat IPv6. Tetapi sistem ini tidak merangkumi kesemua arahan yang terdapat di dalam Cisco Router, ia cuma merangkumi arahan yang asas dan popular. Didalam sistem ini, sambungan antara router dan server adalah menggunakan sambungan TCP iaitu TELNET. Dalam usaha memberi gambaran jelas mengenai arahan-arahan tersebut, satu antaramuka akan digunakan untuk setiap satu arahan konfigurasi router. Pengguna boleh melihat arahan didalam kawasan teks. Salah satu kebaikan menggunakan sistem ini ialah, ia boleh diakses dari mana-mana dan pada bila-bila masa selagi mana terdapat sambungan diantara router dan server di dalam persekitaran rangkaian dalaman.

## LIST OF FIGURES

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