

ABSTRAK

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Skripsi

Desain dan Pembuatan Model *Testing Center* untuk Latihan Ujian CCNA berbasis Web

Cisco Systems, Inc. merupakan salah satu perusahaan yang bergerak dibidang penyediaan alat-alat konfigurasi jaringan dan tenaga kerja *networking*. Dalam rangka mempersiapkan tenaga kerja *networking* yang handal, Cisco menyediakan berbagai program sertifikasi, misalnya *Cisco Certified Network Associate* (CCNA), yang merupakan sertifikasi mengenai teknologi jaringan tingkat dasar mengenai penggunaan Cisco router dan switch pada jaringan LAN/WAN. Untuk mendapatkan sertifikasi CCNA tersebut seseorang harus mengikuti ujian sertifikasi. Dalam tugas akhir ini penulis akan mengembangkan sebuah model *testing center* berbasis web yang akan menyediakan fasilitas latihan untuk menghadapi ujian tersebut.

Melalui sistem yang dibuat dengan memanfaatkan teknologi internet ini *administrator* dapat memilih kategori soal yang akan dibuat, dengan tujuan memudahkan proses *monitoring* bagi kemajuan peserta kelas pelatihan CCNA (*student*). Selain fasilitas bagi *student* melalui *freetest*, terdapat juga fasilitas bagi *non student* melalui *paidtest*, namun untuk fasilitas *paidtest* ini *administrator* tidak melakukan *monitoring* terhadap *non student* (bukan peserta kelas pelatihan CCNA). Fasilitas lain yang ada misalnya pengaturan aktivasi tes dan konfigurasi tes untuk *IP address* tertentu dan fasilitas *history* nilai bagi *student* dan *non student*. Sistem ini dikembangkan dengan teknologi PHP dan Java Script serta penggunaan MySQL sebagai *database* untuk menyimpan semua data yang digunakan dalam sistem.

Pengujian terhadap sistem ini menunjukkan bahwa sistem dapat membantu *user* yang merupakan *student* atau *non student* untuk mendapatkan pelatihan mengenai jaringan komputer. Selain itu user juga mendapat gambaran mengenai bentuk ujian sertifikasi CCNA yang sebenarnya.

Kata kunci:

Testing Center, *Web*, PHP, Java Script, MySQL

ABSTRACT

Astrid Wailanduw:

Thesis

Design and Implementation of Testing Center Model for CCNA Certification Test Preparation

Cisco Systems, Inc. is a leading supplier of networking equipment and network management for the Internet. In order to prepare the best networking labour Cisco has various certification programs, such as Cisco Certified Network Associate (CCNA), which is a certification of basic networking technology using Cisco router and switch on LAN/WAN. To achieve this certification, someone has to attend a CCNA certification test and get at least minimum score that was already determined by Cisco. In this final project, an internet based testing center model was developed to provide a computer based testing material to help student (someone who attend CCNA preparation class at Petra Christian University) in preparing the real CCNA certification test.

Through this internet-based system, administrator can choose question category in order to make student-achievement monitoring easier. Student can measure their abilities through what is called *freetest* facility and so does non student through what is called *paidtest* facility. After student/non student take their test, they are able to access their exam report and feedback. Other facility especially on *freetest* is IP based testing. This system was developed using PHP technology, Java Script and MySQL as a database server to store all data used by the system.

The evaluation of the system shows that the system can help student and non student to get more knowledge about networking and simulation of the real CCNA certification test.

Key Word:

Testing Center, Freetest, Web, PHP, MySQL

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