HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

PC NETWORKS

E. 1358

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Higher Technical Institute

Electrical Engineering Department

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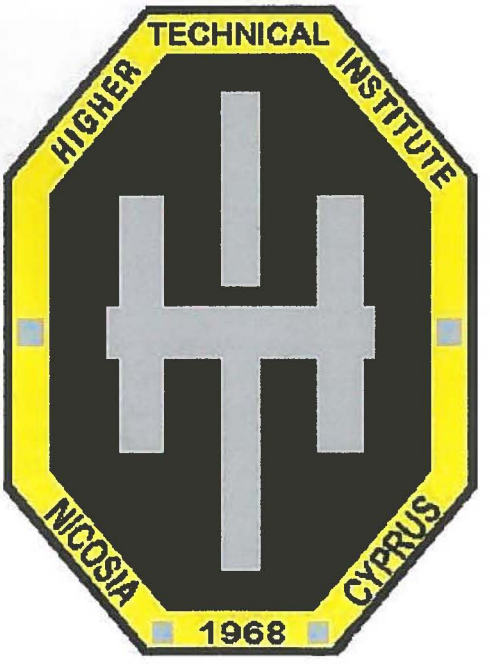

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Brief Contents

Acknowledgment:

Well, this is hopefully the end! These were he three most challenging years of learning. I admit that electrical engineering was not my primary target when I first thought of joining HTI but as time was going by, I felt more and more delighted from the variety of things and the bandwidth of the electrical engineering.

I was caught asleep in the first semester of the first year because I thought that school was over. I was wrong! The real thing was about to begin. I was actually hanging by a thin hair at the end of the year and the fact that I 'succeeded' at the end was something further than my power. Fortunately at the second and third year I woke up and tried real hard to be where I am now, one step before the end!

With this project I am doing my last step. I know that nothing will ever be perfect but I want to believe that I have done a good job with this. I want to say special thanks to my family which have been supportive throughout the year and my lecturers, especially those I worked together to bring this project to this form.

Enjoy your reading.....

'Having once decided to achieve a certain task, achieve it at all costs of tedium and distaste. The gain in self confidence of having accomplished a tiresome labor is immense.' - **Thomas A. Bennett**

George M. Herodotou

Objectives

The target of this project is to provide a general idea to the reader about computer networks giving more emphasis to the local area networks.

We will start by explaining in brief the evolution of computers and data communication so the reader may get more familiar with the subject.

Next we will separate the different kinds and types of networks and their topologies which is very important in order to give to the reader the wanted background to understand the usefulness of networks.

Later on we will get familiar with all pieces of hardware used to build a network including cabling and structure equipment of the network, routers, hubs, switches etc. Then comes the software in which the reader will be able to choose the right software and protocols for a network regarding its use.

There will be a chapter for local area networks and the criteria of choosing between various types and then a brief informational chapter for wide area networks.

For the completion of the work we will have to make some practical work which will be placed in the written report to explain the procedures and work done.