

Exercise 2, “PC Troubleshooting”

Instructions and preparatory questions

Administration of Computer Systems, Fall 2008

This document is available online at:
<http://www.hh.se/te2003/>

Exercise 2 - PC Troubleshooting

Practical information – Read this first!

This exercise consists of two parts:

1. Preparatory questions in this document that should be answered before coming to the exercise session (before starting the exercise session the assistant will ask you to show and explain your answers)
2. A practical exercise session where you will work with actual equipment in order to answer the remaining questions in this document.

The work on preparatory questions as well as practical exercise work is to be carried out together with your assigned partner.

Before starting the practical part show the assistant that you have finished the preparatory questions, when you are done with the practical part you must notify the assistant so that he/she can check and sign your work. No signature = no credits for the exercise.

If you get stuck on the practical part the assistant is there to assist you, however in order to learn you are of course expected to come up with solutions mainly on your own.

Information necessary to complete both the preparatory and practical part of the exercise will be given at the lectures. Lecture slides are available at the course webpage <http://www.hh.se/te2003/>

Good luck and have fun!

Troubleshooting the PC

Your task in this exercise is to identify a number of problems that have been introduced in a lab system. One of the most important objectives of this exercise is to practice a methodical and structured troubleshooting technique.

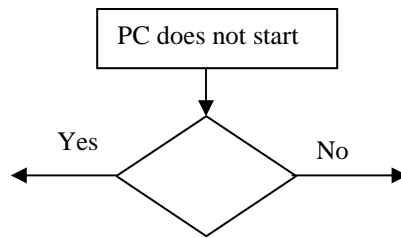
Some of the problems will have apparent solutions, in these cases it is still important that you practice creating test cases and possible solutions before you apply a specific solution.

For each major problem use a new page and 1) fill out the problem description, 2) draw a diagnostic flowchart and 3) record the results of each test as well as the solution to the problem. Also fill out the service log at the end of the page to document your changes.

When you have identified and fixed all problems, validate the results by re-running the benchmarks from exercise 1.

Preparatory question 1

Continue drawing the diagnostic flowchart of actions to take when the PC does not start. For different troubleshooting actions to include in your chart see chapter 21 of “The PC technician’s bench book”. Add at least 10 test cases.



Preparatory question 2

Copy over your benchmark results from exercise 1 so that you can use them when validating the performance of the repaired system.

CPU benchmark results: _____

Memory benchmark results: _____

HD benchmark (without UDMA) results: _____

HD benchmark (with UDMA) results: _____

Problem description: _____

Steps to reproduce: _____

Diagnostic flowchart:

Solution: _____

Service log:

Date and time	Serviced component	Notes	Signature

Problem description: _____

Steps to reproduce: _____

Diagnostic flowchart:

Solution: _____

Service log:

Date and time	Serviced component	Notes	Signature

Problem description: _____

Steps to reproduce: _____

Diagnostic flowchart:

Solution: _____

Service log:

Date and time	Serviced component	Notes	Signature

Problem description: _____

Steps to reproduce: _____

Diagnostic flowchart:

Solution: _____

Service log:

Date and time	Serviced component	Notes	Signature

Validate the system

Rerun the benchmarks from lab 1 and compare the results.

CPU benchmark results: _____

Memory benchmark results: _____

HD benchmark (without UDMA) results: _____

HD benchmark (with UDMA) results: _____

Are there any differences between the benchmark results, why? _____

