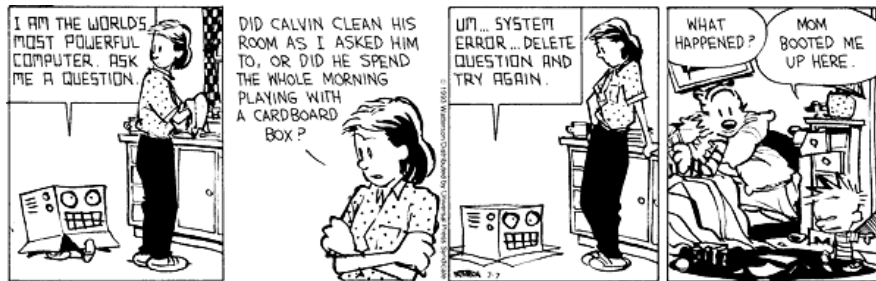


Assignment 1: Hello ETH

November 1, 2005

Hand-out: 25 October 2005

Due: 1 November 2005



Calvin and Hobbes© Bill Watterson

1 Getting started

Goal

The goal of this exercise is to familiarize you with the infrastructure provided by ETH Zurich. In particular, you should learn how to use e-mail and the web-based forum. Please solve the assignment on your own.

To do

- Log in to a computer in one of the computer rooms. The location of the computer rooms is given in the information sheet that you received.
- Log in to the n.ethz.ch account administration page (https://n.ethz.ch/cgi-bin/admin_tool/main.cgi). After logging in you should see the welcome screen (Figure 1). Click on “Passwort ändern” (top of screen), change your password¹ (Figure 2) and log out. After this you can log on to ETH

¹Your password should be simple enough for you to remember; yet it should be complex enough so that other people cannot guess it. See password recommendations at CERN: <http://security.web.cern.ch/security/passwords/>

student web-mail interface (<http://mail.student.ethz.ch/>) with your user name and your newly set password.

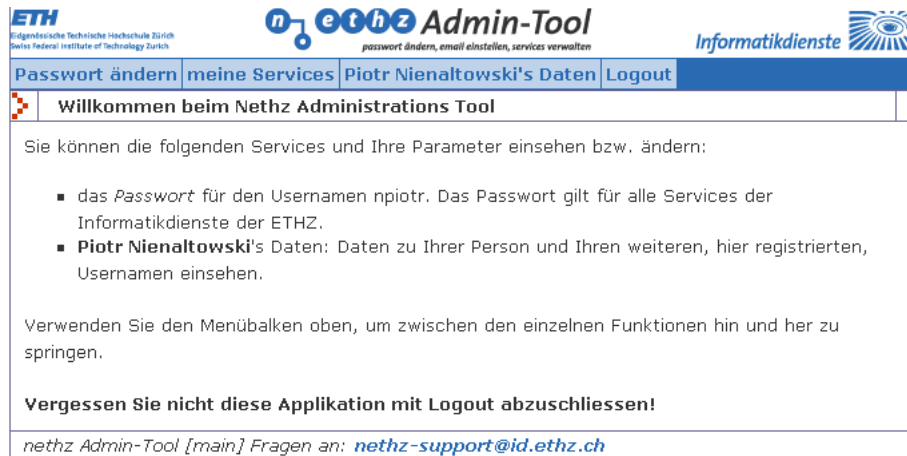


Figure 1: Welcome screen

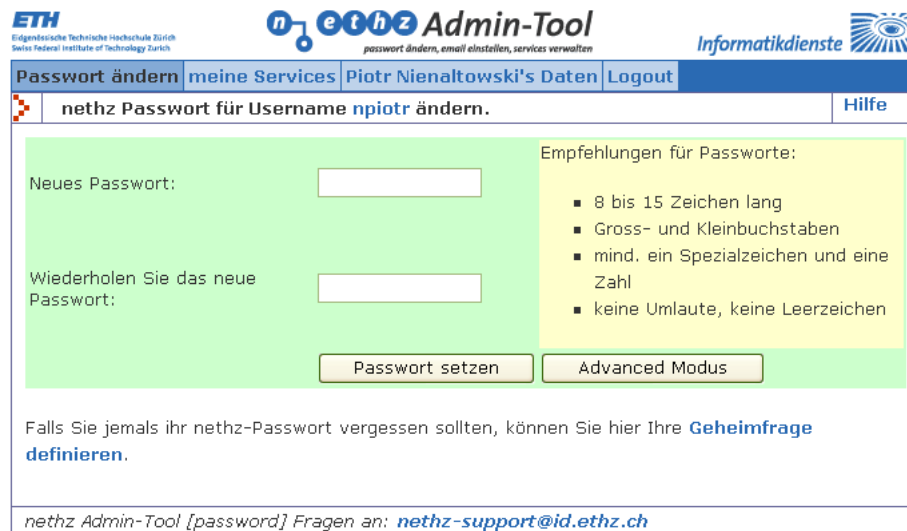


Figure 2: Change password screen

- Try to find the Eiffel development environment - EiffelStudio - on the machine that you are using.

- **IMPORTANT:** Make sure that you have subscribed to this course (and all the other courses you attend this term) on <http://www.einschreibung.ethz.ch/>. Otherwise you might NOT get your testat.

Hint

You will find that your n.ethz login and password are very useful on many other ETH web pages, e.g. the http://www.einschreibung.ethz.ch page mentioned above.

To hand in

There is nothing to hand in; the task is accomplished as soon as you have subscribed to the course.

Solution

The task is accomplished as soon as the student has subscribed to the course.

2 Information sharing

Goal

- Get used to the online forum (see Figure 3).
- Post your (possibly first) message in the forum.
- Visit some interesting websites.

To do

- Go to the Forum der Informatik Studierenden: <http://forum.vis.ethz.ch>.
- Create an account in the forum (click on “Registrieren”).
- Find the discussion thread of your group and post a message there. The message should include a link to a website that is of relevance to either:
 - Starting out at ETH
 - Student life in Zurich
 - Introduction to programming & Eiffel
- Visit some of the links posted by your group members.

Foren	Beiträge	Themen	Letzter Beitrag	Moderatoren
Analysis I Funktionen, Differentialrechnung, Integrale, Vektoranalysis	420	49	Infos und Fragen zu Lösungen d... 16.09.2005 13:12 von sauvage7	daspan, murphey
Einführung in die Programmierung Grundlagen des Algorithmenentwurfs und der Programmierung	1644	128	Basisprüfung Frühling 2005 09.10.2005 23:40 von Florian	--FoB--, daspan, murphey
Lineare Algebra Gleichungssysteme, Determinanten, Skalarprodukte, Vektorräume	408	62	Basisprüfung F05 27.09.2005 21:51 von fettehallo	daspan, murphey
Logik Aussagenlogik, Boolesche Algebra, Prädikatenlogik, Logikprogrammierung	243	31	Fehler im Vordiplomsbündel 21.09.2005 12:52 von ledergec	daspan, murphey
Wahrscheinlichkeitsrechnung & Statistik Zufallsvariablen, Schätzungen, Tests	244	23	Lastminute Fragen 30.09.2005 07:08 von chr1s	daspan, murphey

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neue Beiträge keine neuen Beiträge Forum ist geschlossen

Powered by Burning Board 2.1.3 © 2001-2003 WortLab GmbH Verein der Informatik Studierenden

Figure 3: Forum der Informatik Studierenden

Hint

Try to post a link to a web page that could be of real interest to all your fellow students. Example message:

- The ETH Mensa page <http://www.mensa.ethz.ch/>
It contains information about the opening hours and daily menus of all ETH refectories, cafeterias, and bars.

To hand in

There is nothing to hand in; the task is accomplished as soon as you have posted at least one message in the forum.

Solution

The task is accomplished as soon as the student has posted at least one message in the forum.

3 Searching for information

Goal

- Learn how to search for information using Internet-based tools.
- Discover the ETH libraries.

To do

Write down your answers on a separate sheet, giving the question numbers (3.1 etc.).

3.1 Answer the following questions (in your own words, without using any dictionaries, encyclopaedia, etc.):

- What is *computer science*?
- What is *programming*?
- What is *software*?
- What is *hardware*?

3.2 Now try to find definitions of these four terms using online search tools. Write down the one you find most appealing. You can use the popular *search engines*

- Google: <http://www.google.com>
- MSN Search: <http://www.msn.com>
- Yahoo!: <http://www.yahoo.com>
- Altavista: <http://www.altavista.com>

or the online encyclopaedia Wikipedia: <http://www.wikipedia.org>.

3.3 Compare the definitions you found with your own. Are they very different? Did you expect such differences?

3.4 Go to the websites of the ETH libraries:

- D-INFK library: http://www.inf.ethz.ch/services/library/index_DE
- main ETH library: <http://www.ethbib.ethz.ch/index.html>

and try to find there books whose title contains terms “*computer science*” or “*programming*” (you don’t have anything to submit for this question).

3.5 You’ve been told that there’s a book of which one of the authors is “Nerson” and it’s called something like “Object-Oriented Projects” or maybe “Object-Oriented Developments”. If you needed this book, where would you get it?

Results for W-title= programming
 Sorted by: Year (descending)/Author

Records 1 - 10 of 4417 (maximum display and sort is 1000 records)

#	Author	Title	Year	Holdings
1	<input type="checkbox"/> Sebesta, Robert W.	Programming the World Wide Web	2006	ETH-BIB-(Zuerich) EPF-BC-(Lausanne)
2	<input type="checkbox"/> Sebesta, Robert W.	Concepts of programming languages	2006	ETH-BIB-(Zuerich)
3	<input type="checkbox"/> Summeffeld, Mark	C++ GUI programming with Qt 4	2006	PSI-(Villigen)
4	<input type="checkbox"/> Cominos, Peter	Mathematical and Computer Programming Techniques for Computer Graphics	2006	ETH-BIB-(Zuerich)
5	<input type="checkbox"/> Baader, Franz	Logic for programming, artificial intelligence, and reasoning	2005	ETH-BIB-(Zuerich) EPF-BC-(Lausanne) ETH-INFK-(Zuerich)
6	<input type="checkbox"/> Bai, Ying	The Windows serial port programming handbook	2005	ETH-EE-(Zuerich)
7	<input type="checkbox"/> Banâtre, Jean-Pierre	Unconventional programming paradigms	2005	ETH-BIB-(Zuerich) EPF-BC-(Lausanne) ETH-INFK-(Zuerich)
8	<input type="checkbox"/> Barták, Roman	Integration of AI and OR techniques in constraint programming for combinatorial optimization problems	2005	ETH-BIB-(Zuerich) EPF-BC-(Lausanne) ETH-INFK-(Zuerich)
9	<input type="checkbox"/> Baumeister, Hubert	Extreme programming and agile processes in software engineering	2005	ETH-BIB-(Zuerich) EPF-BC-(Lausanne) ETH-INFK-(Zuerich)
10	<input type="checkbox"/> Bazaraa, Mokhtar S.	Linear programming and network flows	2005	ETH-BIB-(Zuerich)

Figure 4: NEBIS catalogue

Hint

The easiest way to find a book in one of the ETH libraries is to search for it in the NEBIS catalogue: <http://www.nebis.ch> (see Figure 4). Books that are available in the D-INFK library are marked *ETH-INFK-(Zuerich)*, those available in the main ETH library are marked *ETH-BIB-(Zuerich)*.

To hand in

- Submit the best definition you can think of for *computer science* and *programming* based on the information you have gathered (tasks 3.1 to 3.3).
- Have you found the book (task 3.5) in one of the libraries? What is the full title? Who are the authors?

Write down your answer on a sheet of paper and hand it in to your assistant.

Solution

- 3.1 There is no standard solution for this exercise. The definitions given by the Wikipedia are as follows:

– *Computer science*

Computer science (abbreviated CS or compsci) encompasses a variety of topics that relates to computation, like abstract analysis of algorithms, formal grammars, and subjects such as programming languages, program design, software, computer hardware, artificial intelligence, and numerical analysis. By definition, computer science is the accumulated knowledge through scientific methodology by computation or by the use of the computer.

– *Programming*

Computer programming (often simply programming) is the craft of implementing one or more interrelated abstract algorithms using a particular programming language to produce a concrete computer program. Programming has elements of art, science, mathematics, and engineering.

3.5 “Object-oriented applications” by Bertrand Meyer and Jean-Marc Nerson (eds.)

or

“Seamless object-oriented software architecture: analysis and design of reliable systems” by Kim Waldn and Jean-Marc Nerson