REQUIREMENTS ENGINEERING (RE) (הנדסת דרישות)

SPRING 1996 SEMINAR OUTLINE
MEETINGS: Wednesdays 8:30-10:20 Fishbach 413

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Date	Wed.	Topic
March	6	Requirements Iceberg
	13	Requirements Iceberg & Ignorance Hiding
	20	Ignorance Hiding & Importance of Ignorance
May	1	?
	8	?
	15	?
	22	?
	29	?
June	5	?
	12	?
	19	?

This course will be run as a seminar. The instructor will present some of the topics. Each student will be expected to research a topic and present it or to participate in a requirements engineering effort.

The topics covered by the instructor are at least

1. Requirements Iceberg, an overview of the problems and current solutions

2. Ignorance Hiding, an approach to domain modeling

3. Importance of Ignorance, that each RE team requires someone ignorant of the domain

Below is a list of suggested topics that a student can choose:

System aspects affecting requirements:
- System and Software Safety
- User Interfaces

Requirements documents
- User's Manuals
- Requirements Specifications
- Specification Languages
- Standards

Macro level methods
- Contextual Inquiry

Joint Application Development
Ethnography

Detail level methods
Quality Function Deployment
Object Oriented Analysis (OOA)
Use-Case Analysis
Scenario Analysis

Management of requirements
Traceability
Rationale Capturing

This semester the requirements engineering effort will be to write a requirements document for the multi-media classrooms for the Faculty of Computer Science. It will require learning the technology, the costs, and interviewing faculty members.

Course materials are available by anonymous ftp from ftp.technion.ac.il. Login with user "anonymous" and send your login@site as the password. The material for this class is in the directory:

/pub/supported/cs/courses/requirements.engr

You will find there compressed postscript files (all file names ending with *.ps.Z*). For example, this outline is there as *outline.ps.Z*. The file names should be obvious. At the suggestion of a student in the Fall of 1994, I am making the notes available this way. You can ftp them and print them at your own expense. Evidently, this is cheaper than paying Michlol for a hard copy. You will aslo find the same material in PDF form (all file names ending with *.pdf* or *.pdf.Z*), readable by the Adobe Acrobat Reader, which is available for free by anonymous ftp from ftp.adobe.com.

To get the files, after connecting, say "*binary*" to arrange to be able to get binary files (which compressed files are) and then *cd* to the directory mentioned above. To get any particular file *f* say "*get f*". Don't forget to disconnect by saying "*quit*". Once you have quit, back at your home site, to uncompress any file *f.Z*, say "*uncompress f*". The uncompressed file is called *f*. If *f* is of the form *g.ps*, then the result is a PostScript file. This can be printed by use of "*lpr g.ps*" or it can be previewed on your screen with ghostscript, which is describe below. If *f* is of the form *g.pdf*, then the result is a PDF file, viewable and printable with an Acrobat Reader.

GhostScript is called *gs* on most UNIX systems and it assumes that you are running an X-windows. There is a PC version of Ghostscript that comes in two different flavors, one for DOS and one for WINDOWS. The advantage of the WINDOWS version is that you can type commands to it in one window, a DOS shell window, and you will see the results in another, ghostscript graphics window. In the DOS version, both the commands and the results are written to the same, and only screen. You can find the PC version of Ghostscript in `x:\software\ghost` in the file server for the PC farm. Since the program is public domain, you are welcome to copy the stuff there in order to install it on any other PC you have access to.