Contact Information

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- Course page:
  http://www.it.uu.se/edu/course/homepage/os/distvt05
  Here you will find almost everything!!
  - News
  - Lab page
  - FAQ
  - Forum
  - Group forum
Course Evaluation

- Last year -> My lessons learned
- You will have a written course evaluation in the end of this course
- Please let me know problems during the course — I will change things!
This Course

- English
  - Complementary book in Swedish
- Three "Weekends",
  - January 29
  - February 12
  - March 5
- Always Saturday, 8-17
Labs

- Three labs:
  - Saturday afternoons
- Magnus Johansson,
  Room
  Ph#: 018-471 6225
  e-mail: Magnus.Johansson@it.uu.se
Five Group Deliverables

- Groups of three
- Active discussion forum, no e-mailing!!
  www.it.uu.se/edu/course/homepage/os/distvt05/groupX
  where x is your group number
  (this is a sub page under the course page)
    - See that the group is active
    - For me to be able to coach the groups
- Deadlines
- Presentations

- Please contact me if you need help!!
Group Deliverable (GD) 1

- What is an operating system?
  - What parts are included, and why?
  - If you are to build an operating system, what things do you need to consider?
- Write a specification of your new Operating System
  - Don’t forget to consider:
    - Processes, PCB, What do we need to keep track of?
    - Scheduling algorithms
    - Mailboxes vs. Semaphores
    - Synchronization
    - Deadlocks
    - Memory handling, etc
- Lessons learned
- Approx: 5-7 pages.
- You will present these at the next course meeting.
Formats

- .doc
- .pdf
- .ps
- more?
Group Deliverable (GD) 2

- Goal: find five areas to focus on. Three of these will be your GD 3-5 deliverables, I will choose which ones.
- Present five different areas (using the course book, and the reading directions) that you would like to focus on.
- Divide GD 2 into five parts (one for each subject/area), for each of these:
  - Specify the area/subject
  - Motivate me, and your group to really want to do this!! By:
  - Giving some examples why it is interesting
  - Explain some of the problems that may be interesting to look at
  - Give an outline of how the deliverable will look like
- Lessons Learned
- Approx: 8 pages.
- You will present these at the next course meeting.
Example Outline

- Process definition and functionality
  - Introduction
  - What is a process compared to a program?
  - PCB and its contents, and why…
    - What need to be included
    - List and description of each part
    - And is used for…
  - Short about the process concept and scheduling
- Process Creation
  - Memory management
  - fork
- Lessons learned
Example Lessons Learned

- Lessons learned
  - We think we’ll have great use of … bla bla in the future, because bla bla….
  - We want to work more like this… bla bla bla with the next deliverable to learn more.
  - We need help with this: … bla bla bla, from the teacher to learn more during next deliverable…
Take advantage of this opportunity!

- Focus on something you find interesting!
- Sell your ideas to the group!
GD 3-5

- Are selected from GD 2
- Reuse the work you did in GD 2
- Explore the subject further!
- Lessons learned.
- Use pictures!
- Approx: 4-7 pages each.
- Are presented at the next Course Meeting.
Group Presentations

- GD1-5 will be presented at the next class meeting
- 20 minutes
- All group members must be active!
- Focus on teaching your classmates!
- You may select parts of your GD to present (you don’t have to present all!!)
- Exercises?
- Swedish is ok!!
- At your service at the presentation:
  - OH-projector, collect blank slides and OH pens today!
  - a computer with projector
    - Use an USB-memory, a CD, or a 3.5 disk
VG Deliverable

- Present subject and outline today (January 29)
- You will get a deadline (VG1 or VG2) today
- Presentation on next meeting. (10 minutes)
- Lessons learned.
- References
  - Give Correct references. Ex:
  - When referencing a homepage, indicate date. Ex:
- Approx: 5 pages.
- Focus on giving an interesting presentation!!
Group Meetings 2&3 Schedule

- 8 am welcome and discussion
- 8.15 Group preparation + Coffee
- 9.00 Group presentation + questions
- 9.30 Group presentation + questions
- 10.00 Coffee break
- 10.15 VG presentation
- 10.30 Group presentation + questions
- 11.00 Group presentation + questions
- 11.30 VG presentation
- The rest of the time:
  - Post-it evaluation
  - Group Work + preparations for next deliverable
  - Answers to Post-it questions
- 12.00 Lunch
- I will be available until 1 pm if necessary
- 13.15 Lab Presentation
- 14.00-17.00 Lab
Deadlines, see this:

All deadlines are at 17.00.

GD = Group Deliverables due
L = Lab due

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L = Lab due
Practical stuff

- Registration
- Access card
  - Ångströmlaboratorium, Intendenturen, close to Siegbahnsalen.
  - Bring some ID.
- An Account on the computers
- E-mail list: I will use the e-mail list for the course in studentportalen – this means that you are responsible to make sure to forward your e-mail from there if you are not reading these e-mails regularly
Contact and Office Hours

- I’ll answer questions as soon as I can at www.it.uu.se/edu/course/homepage/os/distvt05/forum
- You may e-mail me if you have personal questions
- My weekend after a meeting is Sunday-Monday.
- Otherwise, I have office hours Tuesdays and Thursdays between 10-11
- If you cannot reach me by my office phone at this time, please call my mobil
- More/less??
This is the course

- **Processes and Process Interaction**
  Scheduling: in what order should processes run?
  Interaction: how can processes interact?
  Avoidance of deadlock, starvation, etc.
  LAB: Process Management in UNIX

- **Storage Management**
  Share memory among processes. Pretending to have more main memory than we actually have: Virtual memory.
  LAB: Process Synchronization

- **Information Handling**
  Filesystem: organization and implementation, efficient disk handling, security.
  LAB: UNIX File System
Chapters From the Book

- 1-3: Overview (read)
- 4-8: Process Management (read)
- 9-11: Storage Management (read)
- 12-14: (skim)
- 15-17: (skip)
- 18: Protection (read)
- 19: Security (skim)
- 20-end (skim)
Study tips

- How to read the book:
  - Read fast - to get an overview
  - Read the summary
  - Read in depth

- Do the labs
  - Prepare well before the lab to be able to finish during the lab time

- Get involved in the group deliverables
  - Start now!
  - Turn in on deadlines
  - Participate in the group presentations
Grades

- G grade
  - Passing the three labs
  - Passing the GD 1-5 (group work)
  - Passing the presentations (group work)

- Sick?
  - Let me know, let the group know
  - Continue the group work!
  - Alternative: written exam in May/June

- VG grade
  - G on the VG paper
  - Passing the presentation
Today’s Schedule

- Now: fika!! (Coffee) (Interview one other student)
- -10.30 Division into groups, Group work
- 10.30-11.10 presentations
- 11.15-11.20 Post-it evaluation
- 11.15 Group work GD 1
- 11.55 Answers to Post-it questions
- 12.00 Lunch
- I will be available for questions here until 1 pm if necessary