Computer Systems, B1-2 2018

Introduction

Michael Kirkedal Thomsen

DIKU, September 3, 2018

Overall outline

Week 36-41	Machine architecture and introduction to C programming – C programming in parallel
Week 42	Fall break
Week 43-45	Operating systems
Week 46	No activities (reexam week)
Week 47-48	Operating systems cont.
Week 49-51	Computer networks and encryption
Week 52	Christmas vacation
Week 1-2	Computer networks cont.
Week 3	4-hour written exam (Wed, Jan 23)

Lectures

- Mondays 15-17
- Wednesdays 13-15

Michael Kirkedal Thomsen

Finn Schirmer Andersen

Troels Henriksen

Vivek Shan

(ordered by appearance)

Exercises

- Mondays 13-15
- Wednesdays 10-12
- Wednesdays 15-17 (help with assignments)

TAs:

- Alex Bruun Hemmingsen – Mon @ RF071, Rockefeller komplekset
- Jens Kanstrup Larsen – Mon @ Seminar B, AKB
- Jeppe Werner Laursen – Mon @ 2-0-25, Biocenter
- Kristian Bøjer Andreasen – Mon @ C103, HCÃŸ
- Ludvig Karstens – Mon @ AB Teori 2
- Mathias Graae Larsen – Mon @ 1-0-04, DIKU
- Minh Duc Tran – Mon @ 3-1-25, DIKU
- Troels Korreman Nielsen – Mon @ RF061, Rockefeller komplekset

Look at course details (online) for locations.

Groups

Size

2-3 student advised. 1 can be accepted but not recommended. More than 3 not allowed.

- Sign up for classes with your group-mates on Absalon
- If you need one or more members
  - Come to Aud 4 Tuesday Sep 5 @ 11:00 (just after MASD)
  - Course ambassadors will facilitate

Teaching Material

BOH Computer Systems: A programmer's approach, Randal E. Bryant and David R. O'Hallaron, Pearson, 3rd and Global Edition, ISBN 13: 978-1292101767

KR Computer Networking: A Top-Down Approach, James F. Kurose and Keith W. Ross, Pearson, 7th and Global Edition, ISBN 13: 978-1292153599 (This book will not be used before December)

JG Modern C, Jens Gustedt, `http://icube-icps.unistra.fr/img_auth.php/d/db/ModernC.pdf`

?? Some notes and book chapters that will be made available through the detailed course schedule

BOH is (and KR will be) available at Academic Books at Panum (http://www.academicbooks.dk/ (Links to an external site.)) and Polyteknisk Boghandel at Biocenteret (http://www.polyteknisk.dk/ (Links to an external site.)).

Assignments

- There are 8 assignment in total during the course with deadline roughly every week or second week (all Sundays). The assignments will be evaluated with points.
- Assignments will be awarded zero to 4 points.
- You are required to achieve at least 50 % of the total number of points (equal to 12).
- A0 and A1 is counted as one assignment.
- Also we will require that you achieve points in each the of topics of the course to ensure that you have touched all parts of the curriculum.
- Assignments are made to be solved in groups of 2-3 students, but you can also do them by alone.

Assignment rules

Each group must make their own solution.

This means

- You can talk with other people about the assignments: Teachers, TAs, other students, etc.

- You cannot share written code with other groups.
- You are not allowed to use code that you did not write yourself without proper citation.
- You cannot share written text with other groups.
- You are not allowed to use text of material without proper citation
  - This also includes material provided on the course.

Tools

- C compiler – gcc
- C debugger – gdb
- Image for VirtualBox will be available
  - Special setup of VirtualBox is needed and will be done at exercises
- You can also install most tools on you laptop
  - Linux: most available though apt
  - OS X: most available though Homebrew
  - Windows:
    - Linux though Cygwin
    - Windows Subsystem for Linux?!?
- Set up your tool chain
  - recommended using git to share code and reports in your group
  - Sign-up at GitHub today and apply for the *Student Developer Pack*
  - `https://education.github.com/`
- Tool-site is available on Absalon/Github

Teaching format

Questions?