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V2.0

SW3ISU

Introduction

This first lecture introduces the course (*Course information*) and gets you started on the first 1 topic namely OSs (*Intro to OSs*). What to read and relevant questions for each part can be found in the following sections.

Content and reflection

SW3ISU Introduction

Themes

- Course information[**sw3isupres**][**sw3isuguide**]
  Overview, material and expectations

- Studying[3]
  Reading and understanding large texts

Questions

- What is required in terms of exercises - labs and reviews

- When writing a review, which elements have to be present and to what extend

- Where do I get a *Raspberry Pi Zero Wifi* and where do I get information about it

- Where do I find the material for this course

- How do I study efficiently (not covered in the lecture per se - but considered a must!)

Intro to OSs

Themes

- OS[2, chap. 1-4.4][1]
  Covers
  - What is an OS
  - Kernel (and types)
  - Processes
  - Memory
  - I/O
  - Real-Time OS
  Note: [2] - is a relative short text on the subject. Which is why it has been chosen!

Questions

- Grasp the different major concepts that make up an OS

- Which different OS categories do you believe exists

- What is a process and from where does it come from

- What is *protection* or *sandbox* in relation to a process

- What happens in Userspace and/or in Kernelspace

- Can a process have multiple threads?

Linux Terminal Introduction

Themes

- Getting to know the Linux Terminal[4][5]
  Video material

Questions

- Whats do you think a terminal is for

- Which commands were shown in the videos

- What's a folder

- How do you create and delete a folder

- How do you create and delete a file

- How do you edit file

Material

Slides

[1]   S. Hansen, *Intro to oss*, Slides - see course repos.

Local repository

[2]   R. B. Muhammed, *Introduction to operating systems*, TFJ composed a pdf based on the text from: http://www.personal.kent.edu/%7ermuhamma/OpSystems/os.html.

Online

[3]   Studiemetro. (2013). "Aktiv akademisk læsning." Danish, [Online]. Available: `https://www.youtube.com/watch?v=WTu2-HSw5Ow`.

[4]   D. Rumbaugh. (Aug. 2012). "Linux terminal tutorial episode 1," [Online]. Available: `https://www.youtube.com/watch?v=2FiQSLdnBqA`.

[5]   ——, (Aug. 2012). "Linux terminal tutorial episode 2," [Online]. Available: `https://www.youtube.com/watch?v=_JWj6u8mI7k`.

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