

# Grundlagen der Programmierung

## Bachelor

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2012





## Romain PELISSE

- **Middleware Consultant** at [Red Hat](#) (2011)
  - Architecte Middleware JBOSS
  - Red Hat Linux Technician
- Committer [PMD](#) and [XRadar](#)
- Translation for [HgBook](#)
- Teach build technologies and OPP at [ESME Sudria](#)



## Some practical details

- I have previous experience in teaching, but to **technical** people or student
  - ... so *stop* me, if I go too fast !
- I'm French, but I teach in **English** because my *Deutsch ist schrecklich*
- Session last 3 hours, and are divided into :
  - 15 minuten : small MCQ (Multiple choice questionnaire), starting next week
  - 1 hour
  - 30" break
  - 1 hour
  - 15" buffer if we are late or need to go deeper
- we are here to **interact**, not to get your ears used to crappy english spoken by French people...



## Sessions agenda

- 14h00 bis 17h30 - Freitag 04.05 (1/7 - 3h)
- 14h00 bis 17h30 - Freitag 11.05 (2/7 - 3h)
- 14h00 bis 17h30 - Freitag 25.05 (3/7 - 3h)
- 14h00 bis 17h30 - Freitag 01.06 (4/7 - 3h)
- **14h00 bis 17h30 - Freitag 22.06 (5/7 - 3h)**
- 14h00 bis 17h30 - Freitag 29.06 (6/7 - 3h)
- 14h00 bis 17h30 - Freitag 13.07 (7/7 - 3h)

## Be careful !

Those dates can changes (and some will probably) - always checkout on Moodle if a session has not been rescheduled



## Goals

- Basic understanding of how and why program
- Impact in **your** job
- Enhance your communication skills with technical people

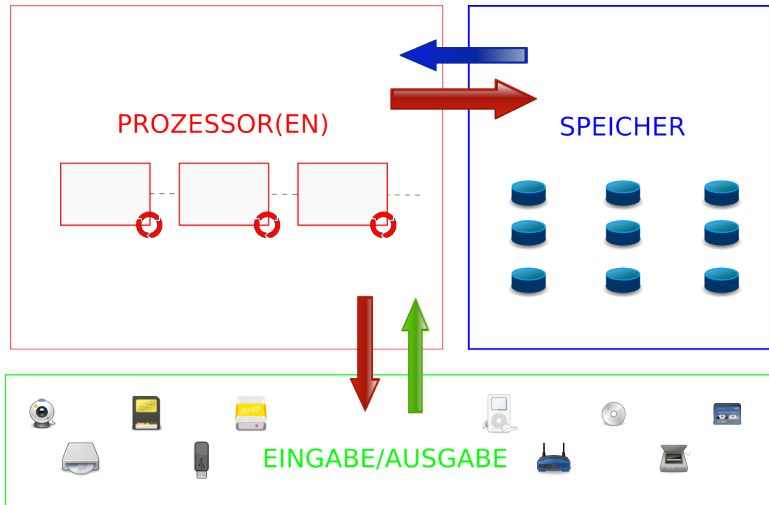
## Who are you ?

- Quickly gives us an hint of you are and where you come from...



What do you know about **how** a computer work ?



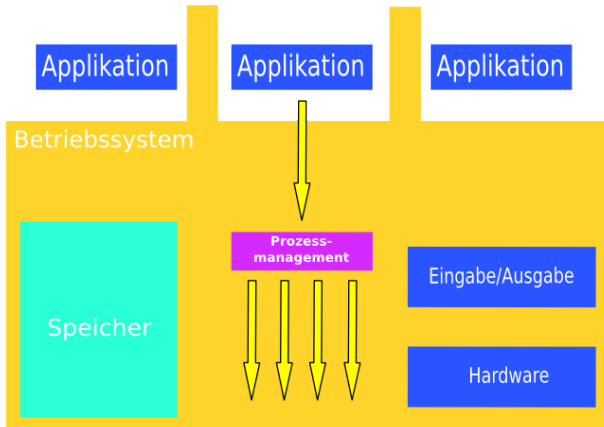


- What is an **operating system**(OS) ?
- Name a few OS names that you know of ?
- What does exactly an operating system ? What are its **responsabilities** ?



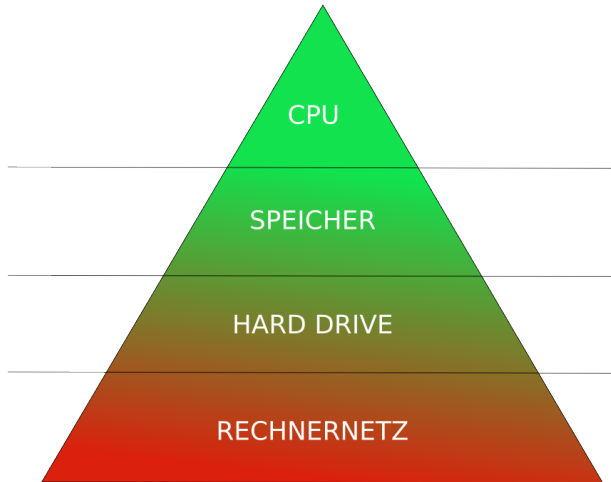


# Role of an Operating System

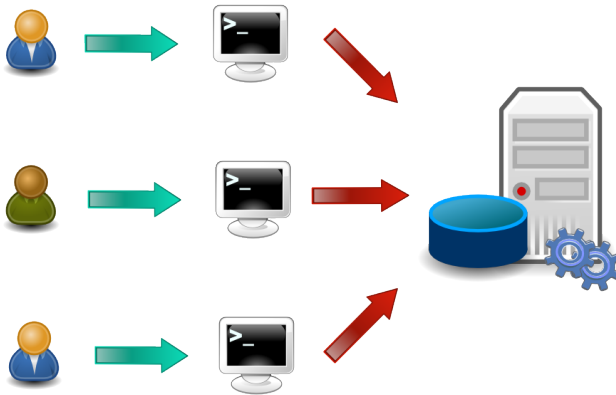


Deutsch bei Christina Quast ©

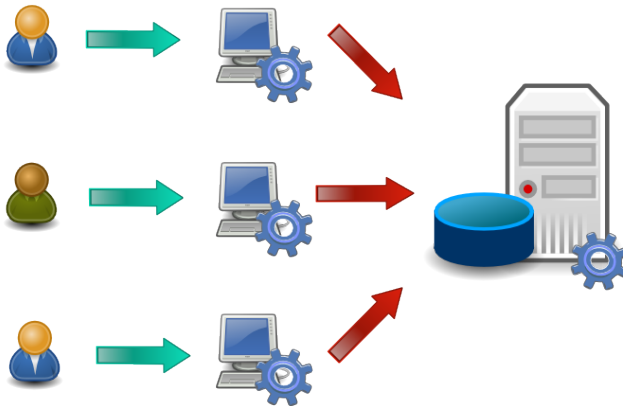




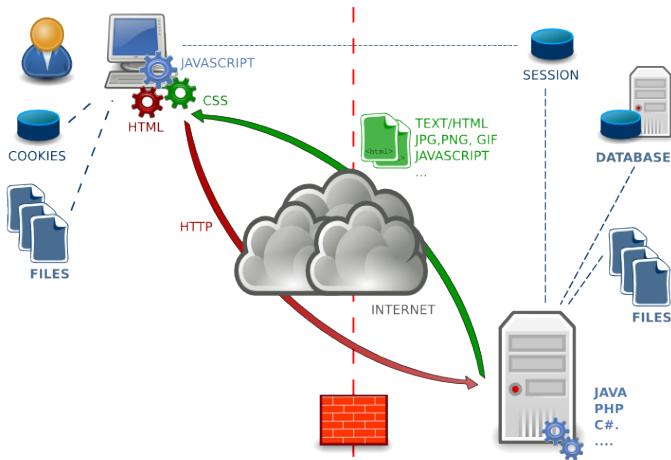
# First era of IT : Mainframe and terminals



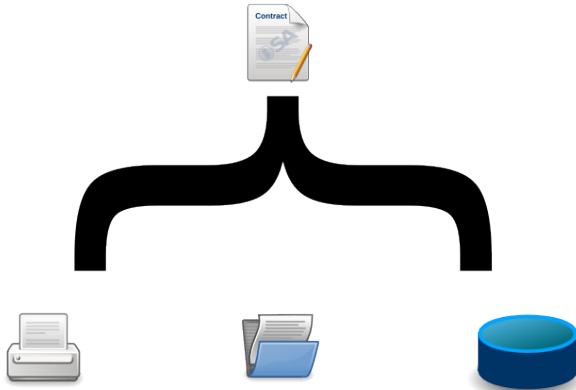
# Second era of IT : Clients and servers



# Third era of IT : The Internet

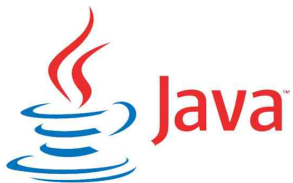


# Data persistence



## What is Java ?

- **programming** language
  - "look-like" C code
  - **Object Programming Oriented**
  - strongly **structured**
- operating system **independant**
- running within a **virtual machine**
- with automated memory collection



## Compiling code....

- What for? What does it do? What does it bring?
- Must all languages be compiled?
- If not, what is the point of compiled language?





## The infamous Hello The World program...

- What is this program ? What does it do ?
- Why does programmer always start by writing such a program ?
- Let's see how to implement such a program in Java...

