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WRAP UP

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WRAP UP 1:
DATABASES & WEB SERVICES

Databases

- Database = structured, queryable data set
- Database system = efficient management of large, complex data for many users concurrently
- SQL query describes structure of result ("what"), not algorithm how this result is achieved ("how")
  - tables → query → table
  - DBMS responsible for efficient evaluation

Web Services

- World Wide Web = another Internet service
  - http for communication
  - URIs for linking information
- Semantic Web for complex question answering on the Web

[scienceroll.com]

Security

- Critical for both databases & Web services
- Encryption = life saver
- Email disclaimer ≠ life saver
- Hacking = exploitation of security leaks
  - Often: force data interpreted as commands
  - ex: SQL injection, buffer overflow

[webdesignerdepot.com]

Wanna Practice More?

- Learn website CMS
  - Content Management Systems like drupal, wordpress, and joomla
- Winter course offered by Warren Laine-Naida:
  - „SPECIAL NEEDS workshops upon request
    ... basic html, photoshop, etc ...”

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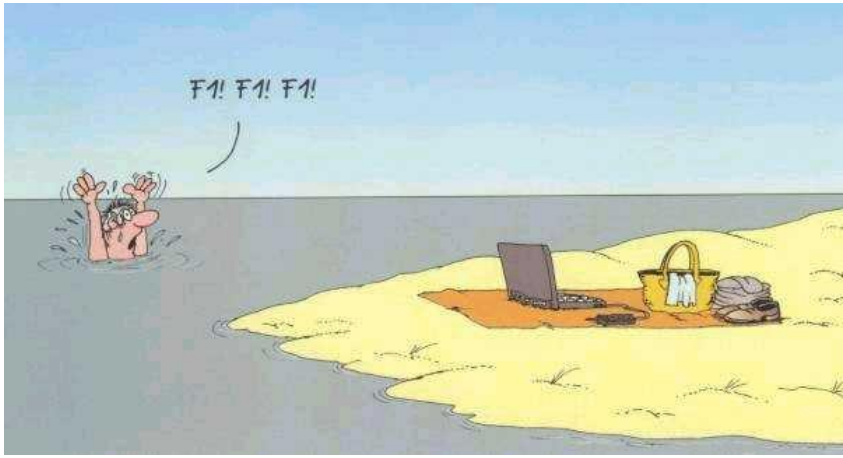
WRAP UP 2:
GENERAL ICT 1

What We Learnt

- Introduction to Information Processing
  - Programming, python; encoding, numbers, symbolic information; structure of programs; IPR
- From Symbols to Computing
  - Boolean logic; complexity
- Computer Architecture and Distributed Systems
  - Computers; program execution (processes); resource management, communication; Internet ; Network (in)security
- Databases and Web Applications
  - Databases; SQL; Web services; Security

Goal of this Course

- Understand key concepts of Computer Science & Information Technology



[onlyfunnyjokes.com]

- Good for communication with CSers / IT experts
- Not good for own programming or system design
  - Not replacing rigorous Computer Science studies
- „more than just surfing, less than harcdore IT“