

350101

# GENERAL INFORMATION & COMMUNICATION TECHNOLOGY I (GENICT-1)

## - DATABASES & WEB SERVICES-

Instructor: Peter Baumann  
email: [p.baumann@jacobs-university.de](mailto:p.baumann@jacobs-university.de)  
tel: -3178  
office: room 88, Research 1

# This Course (Part)

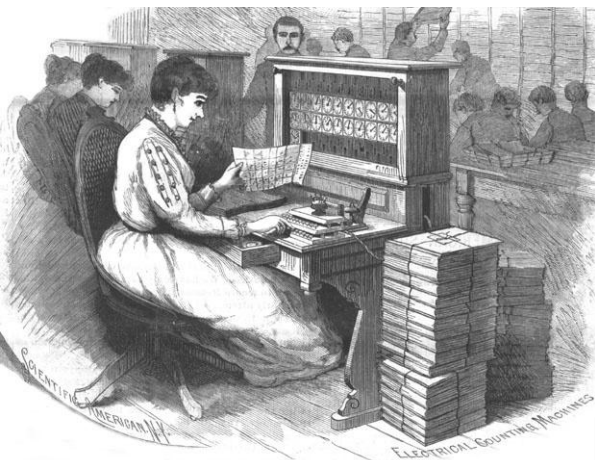
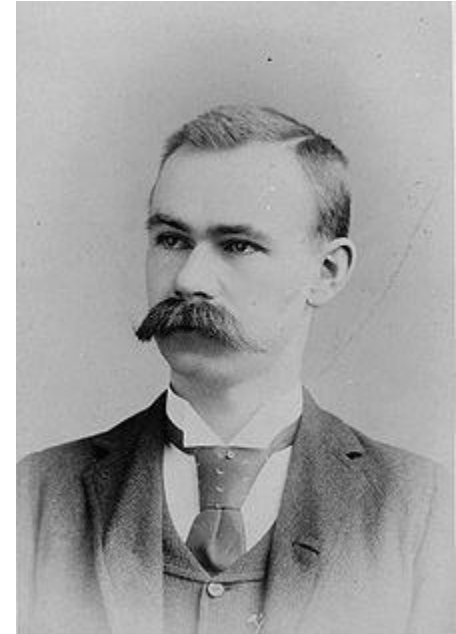
- Objective:
  - Introduction to **core concepts** from DB & WS
  - „having seen that once“
  - Some simple, but useful IT **practice**
  - Not: fast track to Web programmer, database specialist
- Grade components
  - Exam: 80% - last session of this phase, during course time
  - Homeworks: 20%
  - PS:
    - *Homework extensions – no need to try*
    - *Exam makeups – nothing you want*

# Roadmap

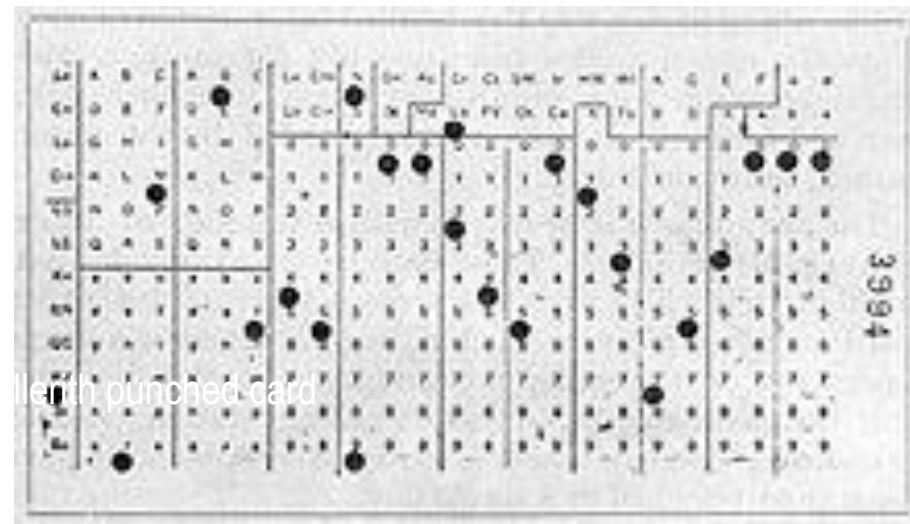
- databases
- querying databases
- more about databases
- Web services
- database & Web services (in)security
- wrap-up & exam

# Where It All Started

- 1890 census on US population of 62,947,714
  - announced after only six weeks of processing
- Hollerith „tabulating machine and sorter“
  - Hollerith card puncher, used by United States Census Bureau
- Tabulating Machine Company  
→ International Business Machines Corporation

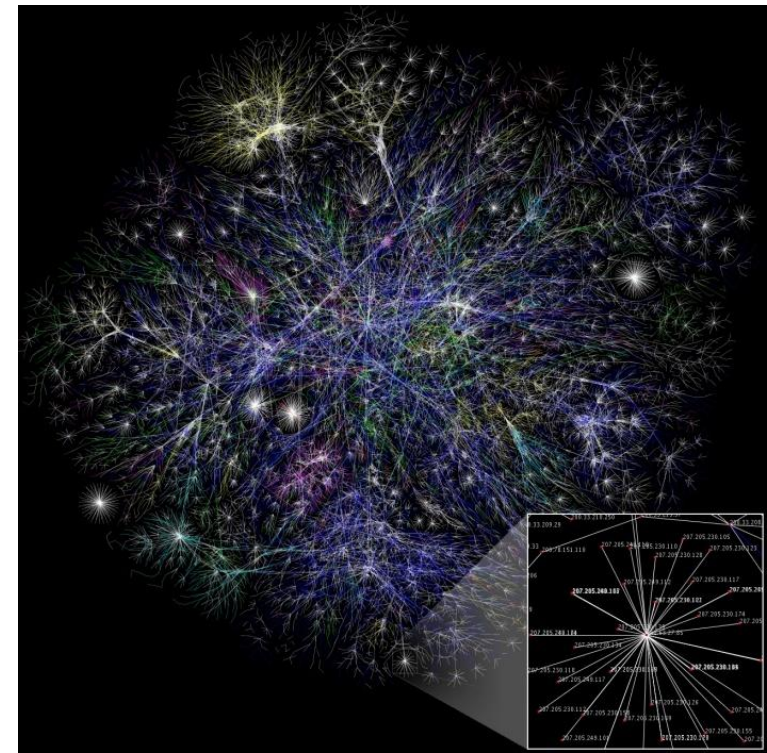


[images: Wikipedia]



# History: Internet & Web

- 1960s **Internet** as (D)ARPA project: fault-tolerant, heterogeneous WAN (cold war!)
  - *telnet; ftp; mail; news*
- 1976 Queen Elizabeth sends first email. first state leader.
- 1980 Berners-Lee at CERN writes notebook program to link arbitrary nodes
- 1990 Berners-Lee begins hypertext GUI browser+editor, dubs it "**WorldWideWeb**"; first web server developed
- 1991 May 17 – general release of WWW on central CERN machines
- 1994 > 200 web servers by start of year
- 2012 May: 200m Web servers [Yahoo]





# What Happens in an Internet Minute?



## And Future Growth is Staggering

