Università della Svizzera italiana

**Faculty of Informatics**

# Introduction
## Web 2.0 Technology Atelier

Prof. Cesare Pautasso

http://www.pautasso.info

cesare.pautasso@usi.ch

@pautasso

# World Wide Web

- On the Web anyone can access, publish, and share hyper-multi-media information
- The Web is the next operating system platform for delivering software applications to users
- The Web works thanks to open standards

# Web Operating System

- The network is the computer
- http://en.wikipedia.org/wiki/Web_desktop

# What is Web 2.0?

- Web 2.0 is the business revolution in the computer industry caused by the move to the **Internet as a platform**

## Main Web 2.0 Concepts

- The Long Tail
- Collective Swarm Intelligence
- Network Effects from User Contributions
- Software as a Service

## Web 2.0 Technology?

- Web 2.0 does not imply a new revision of the underlying Web technologies

Read+Write → **Web 2.0** ← Realtime

↑ "New" Technology
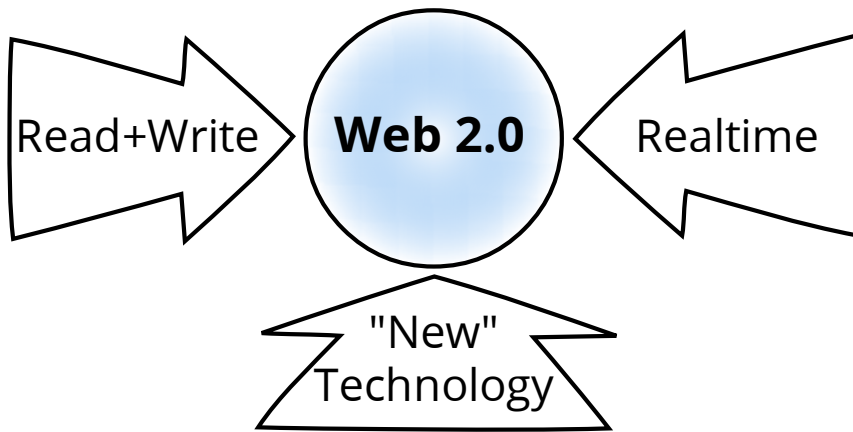
## 1.0 vs. 2.0

| | |
|---|---|
| Publishing | Participation |
| Homepage | Blog |
| Content Management | Wikis |
| Britannica Online | Wikipedia |
| Dialup | Broadband |
| Akamai | BitTorrent |
| Directories (Taxonomy) | Tagging (Folksonomy) |
| Screenscraping | Web Services APIs |
| Doubleclick | Adsense |
| Netscape IPO | Google IPO |

# Web Development

Professional Web development requires to master technical **computer science** skills, the art of **graphical design**, and a good understanding of **usability** and user requirements

Web Technology

Graphics
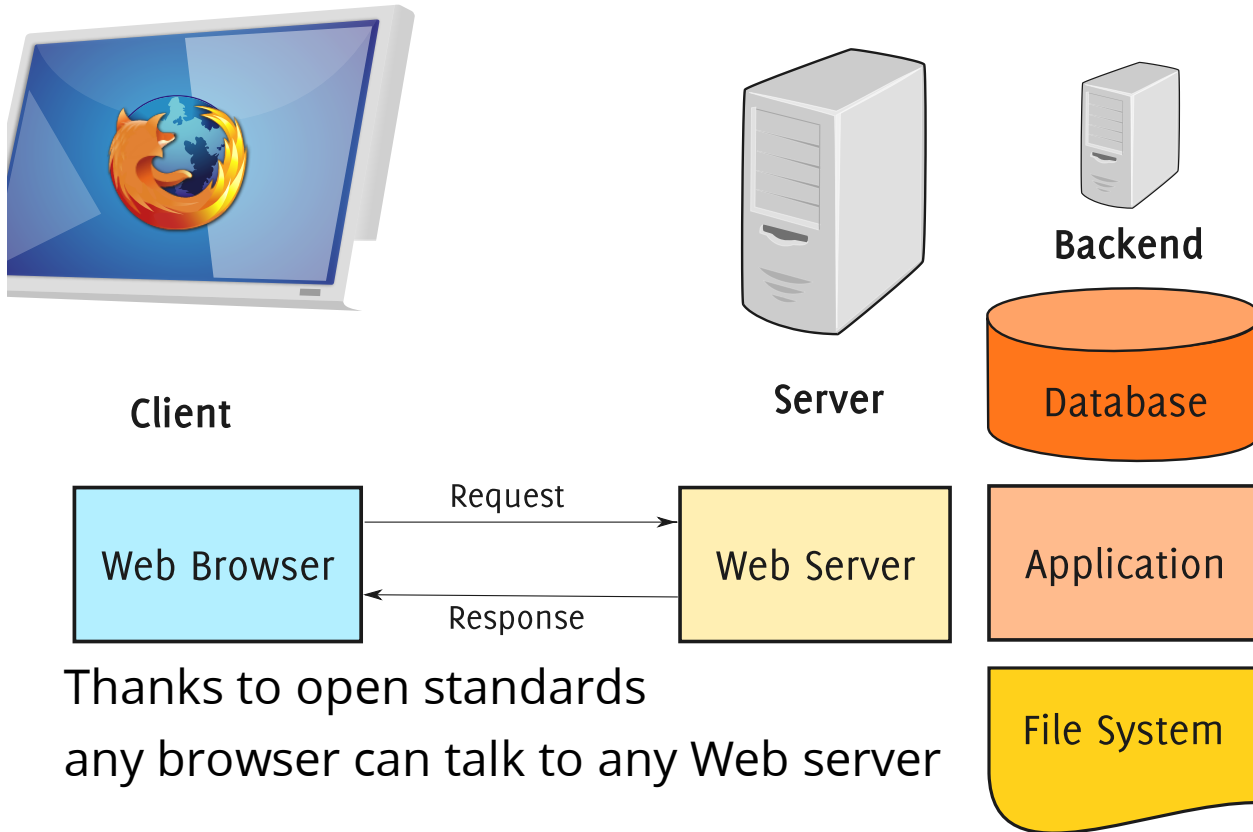Design

Usability
Communication
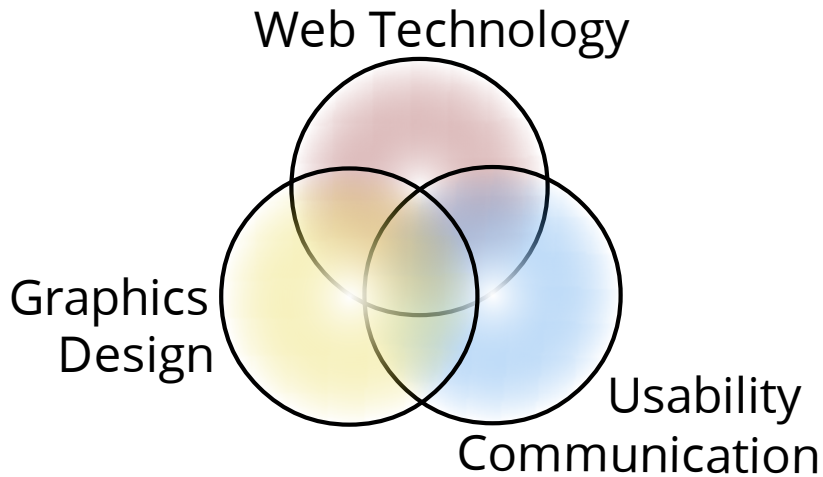
In this atelier you will learn the most important basic technologies related to Web development by exercising them on practical projects

Do not forget that the Web is a **medium** to deliver **content** to **people**

Never loose sight of the message
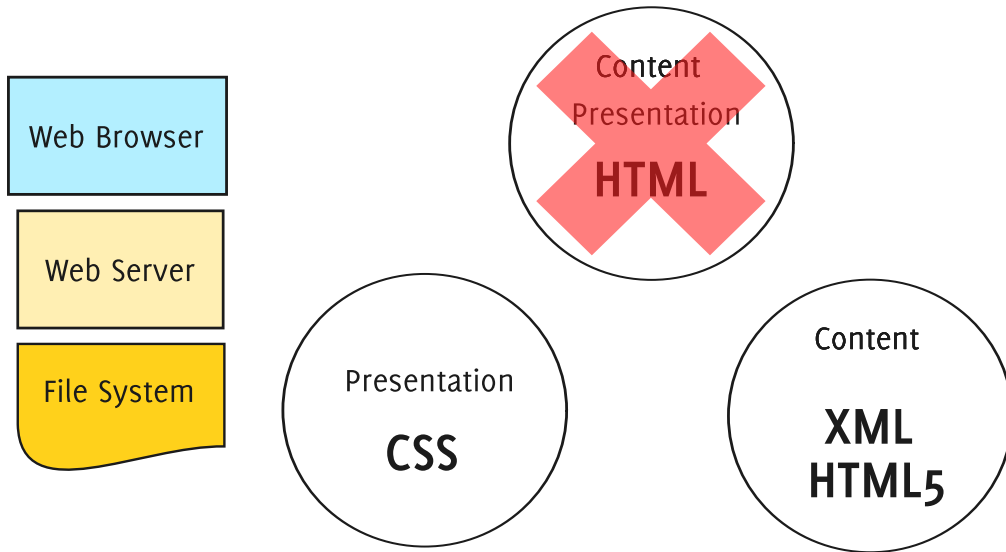Always choose the most effective technique to deliver it

# Web Architecture

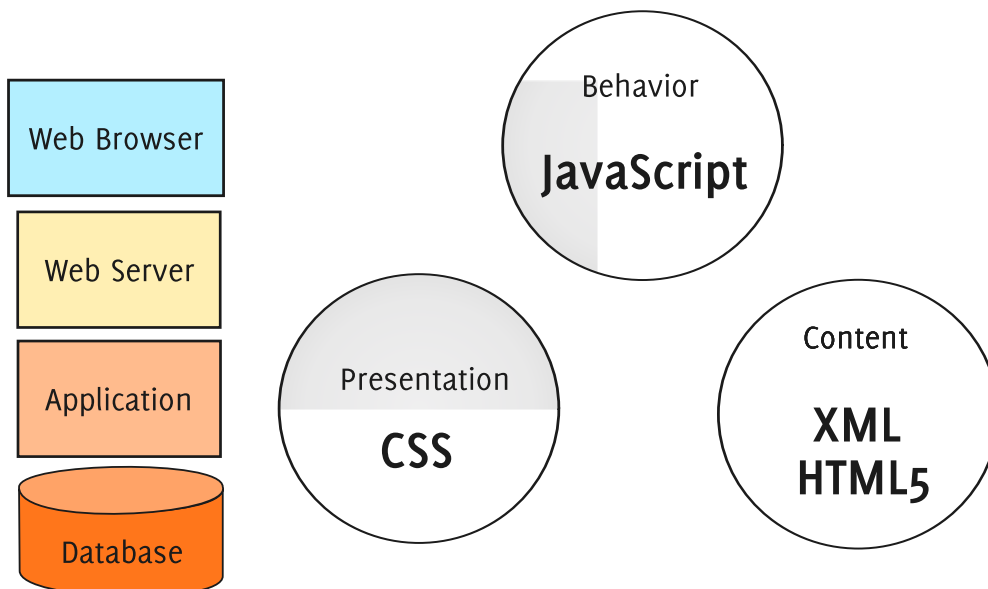Client/Server architecture with synchronous interaction

**Client**

**Server**

**Backend**

| Web Browser | | Web Server |
|---|---|---|

Request →

← Response

**Database**

**Application**

**File System**

Thanks to open standards
any browser can talk to any Web server

# Static Web

Web Browser

Web Server

File System

Content
Presentation
**HTML**

Presentation
**CSS**

Content
**XML
HTML5**

# Dynamic Web

Web Browser

Web Server

Application

Database

Behavior
**JavaScript**

Presentation
**CSS**

Content
**XML
HTML5**

# Standards

- HyperText Transfer Protocol (**HTTP** 1.0, 1996 - 1.1, 1999)
- HyperText Markup Language (**HTML** 1.0, 1989 - 2.0, 1994 – 3.2, 1997 – 4.0, 1998 - **XHTML** 1.0, 2000 – 1.1, 2001, - HTML5 , ?))
- eXtensible Markup Language (**XML** 1.0, 1998)
- Cascading Style Sheets (**CSS** 1.0, 1996 - 2.0, 1998 - 3.0, ?)
- Portable Network Graphics (**PNG** 1.0, 1996)
- JavaScript (1995 - ECMA-262 Standard 5$^{th}$ edition 2009)

And their   implementation history

# Learning HTML

Beginner's tutorials:

- http://www.w3schools.com/HTML/
- http://www.html-5-tutorial.com/
- https://thimble.webmaker.org/en-US/

by example: whenever you find an interesting page, **Look at the source!**

# Links

http://www.delicious.com/cesare.pautasso/sa3

Subscribe to  the atelier feed

# References

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- Jeffrey Zeldman, Designing With Web Standards, Peachpit Press, ISBN 0321385551 -  http://www.zeldman.com/dwws/ (http://www.zeldman.com/dwws/)
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