

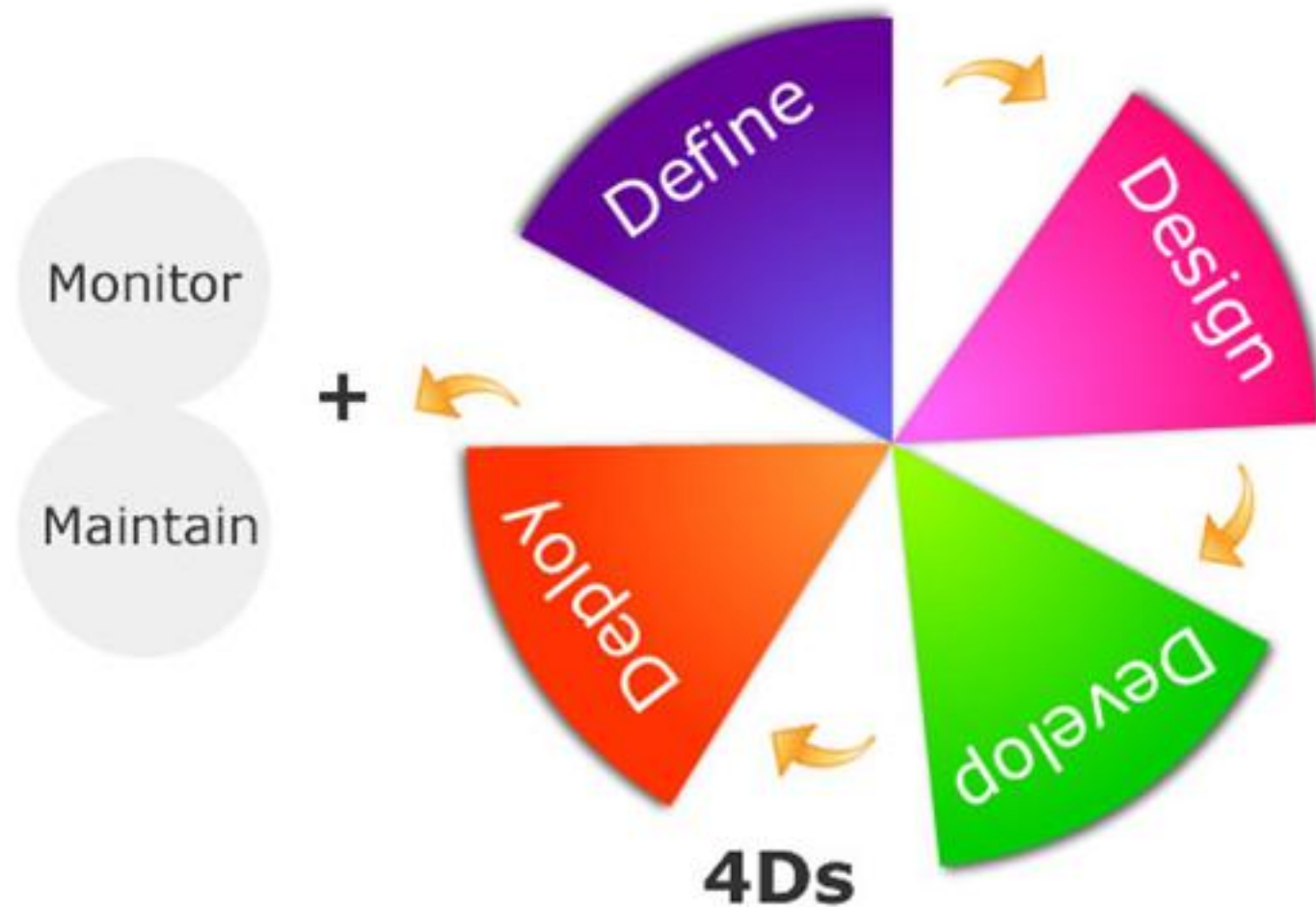
ФАКУЛТЕТ ЗА ИНФОРМАТИЧКИ НАУКИ И КОМПЈУТЕРСКО ИНЖЕНЕРСТВО

Introduction in graphic design theory

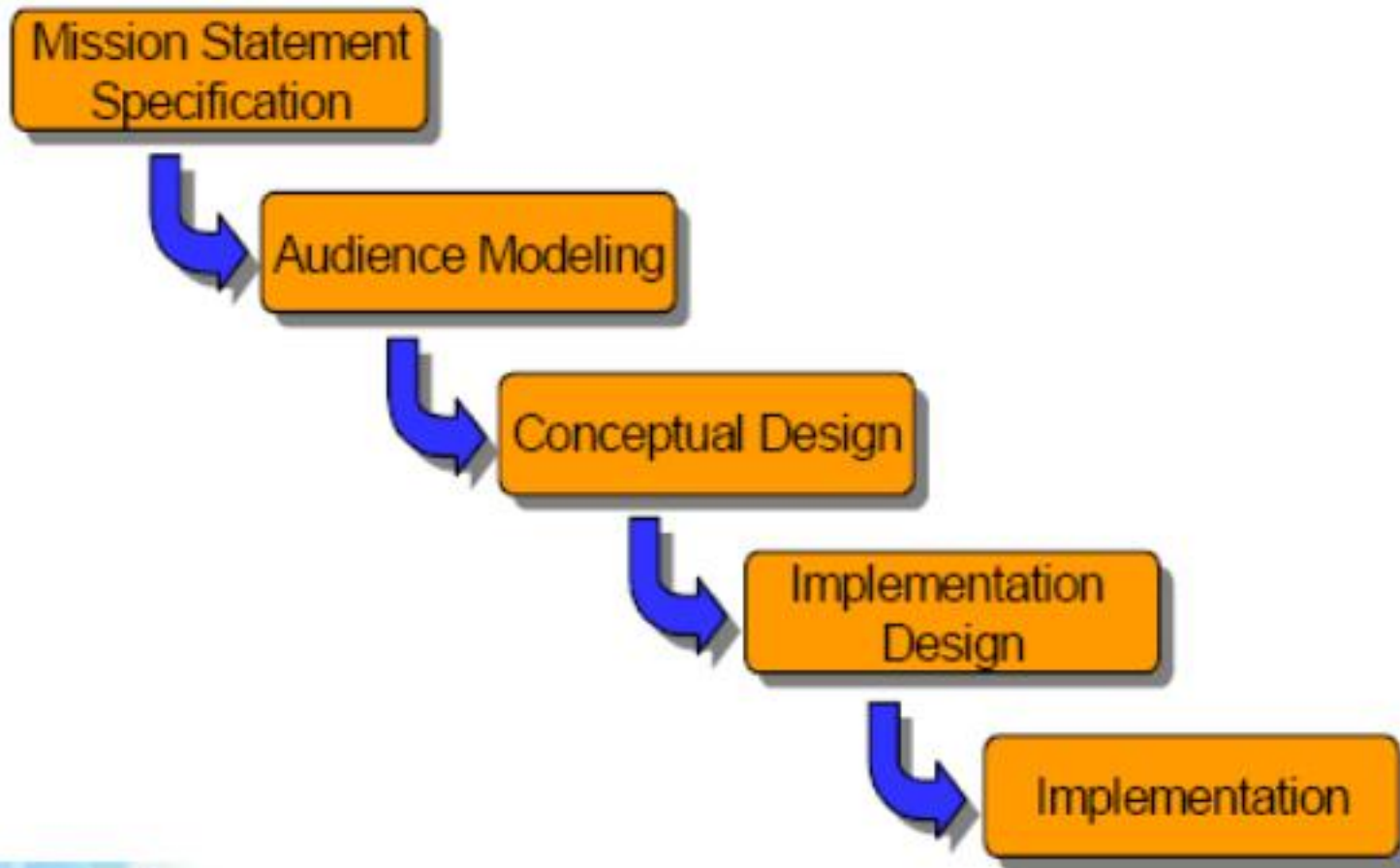
Basics of Web design

ФИНКИ 2013

4Ds of Web Design



Web design stages



Software sales lifecycle



Software sales lifecycle



Software sales lifecycle



Software sales lifecycle



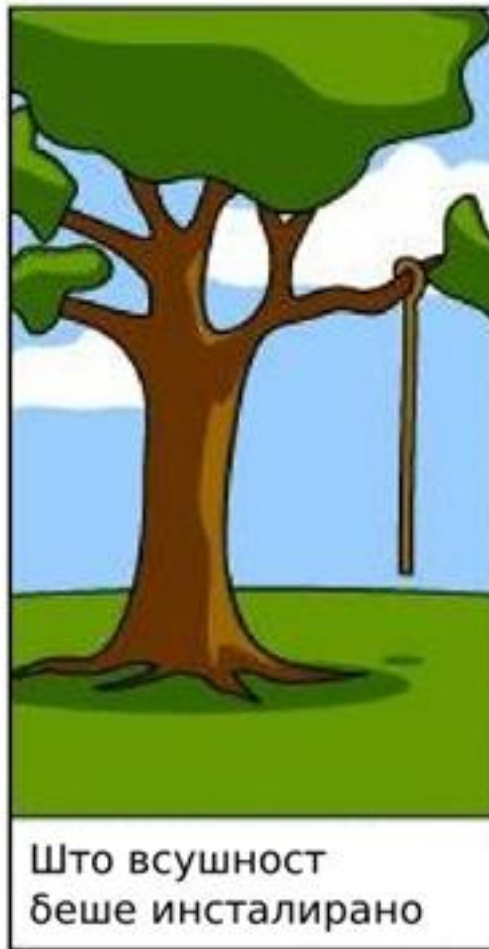
Software sales lifecycle



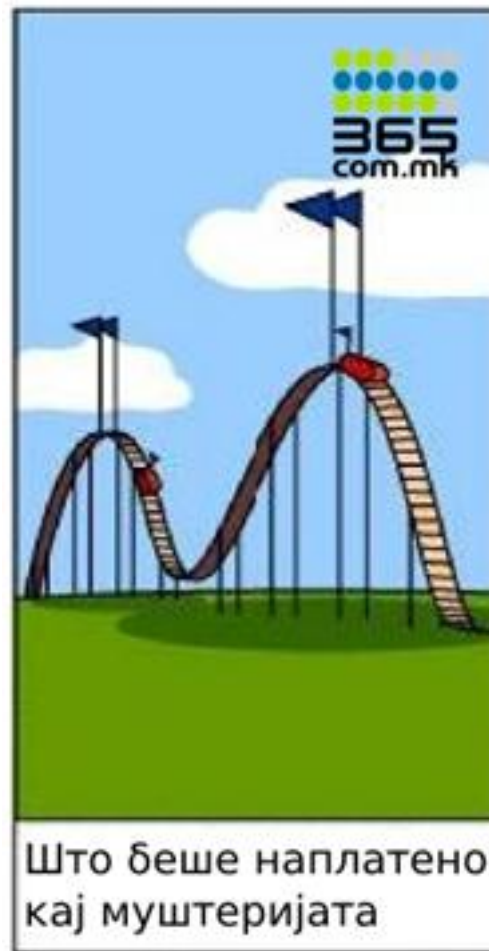
Software sales lifecycle



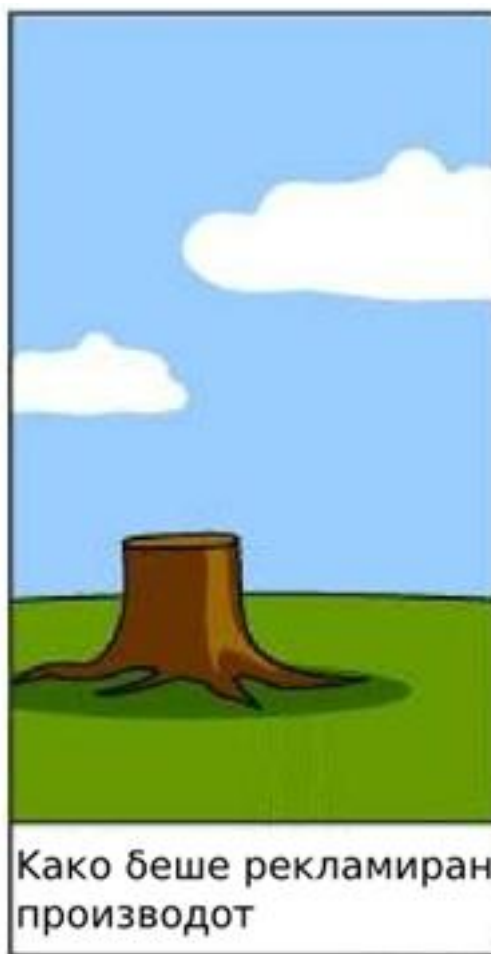
Software sales lifecycle



Software sales lifecycle



Software sales lifecycle



Software sales lifecycle



Three steps in web design

- Design of information
- Web site design
- Web page design

Design of information

- Goals
- Audience
- Contents

Design of the web site

- Structure / organization
- Navigation
- Interaction / functionalities
- Usability / efficiency

Design of web pages

- Distribution
- Schematics
- Model
- prototype

Information design

- Information design or information architecture is the first stage of web design.
 - Bigger involvement of the customer is needed
- Define the goal
 - Who should participate
 - What is the goal of the customer
 - Short term and long term goals
 - Previous experiences
 - Why a website
 - What web site size is needed

Defining the audience

- Age group?
- Number of visitors
 - ☐ Transfer capacity
 - ☐ Server features
 - ☐ Support crew
- Internet access type
- Audience previous knowledge
- Audience needs
- Audience education

Audience evaluation

■ Demographic

- ☐ Sex, age, nationality, geo-location, education, income, marital status

■ Webographic

- ☐ Online time spent, usage frequency, type of access, time of access, connection speed, computer type, browser, monitor

■ Psychographic

- ☐ Behavior, interests, character,

■ Based on behavior and activities

- ☐ Online gaming, online trading, sports, marriage, cooking, partying

■ Based on specific experiences on the web site or similar sites

<http://www.internetworldstats.com/stats4.htm>

Internet and Facebook Usage in Europe

EUROPE	Population (2012 Est.)	Pop. % of World	Internet Users, 30-June-12	Penetration (% Population)	Internet % World	Facebook 31-Dec-12
Europe	820,918,446	11.7 %	518,512,109	63.2 %	21.6 %	250,934,000
Rest of World	6,196,928,476	88.3 %	1,887,006,267	30.5 %	78.4 %	725,009,960
TOTAL WORLD	7,017,846,922	100.0 %	2,405,518,376	34.3 %	100.0 %	975,943,960

NOTES: (1) European Internet Statistics were updated for June 30, 2012. (2) Facebook subscriber data is for December 31, 2012. (3) Population is mid-year 2012 based mainly on data from the [US Census Bureau](#). (4) Internet usage numbers come from various qualified sources, mainly from data published by [Nielsen Online](#) , [ITU](#), [Facebook](#), [GfK](#) , and other trustworthy sources. (5) Data may be cited, giving the due credit and establishing an active link back to [Internet World Stats](#) . Copyright

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MACEDONIA (FYR)

MK - 2,087,171 population (2013) - Country Area: 25,433 sq km

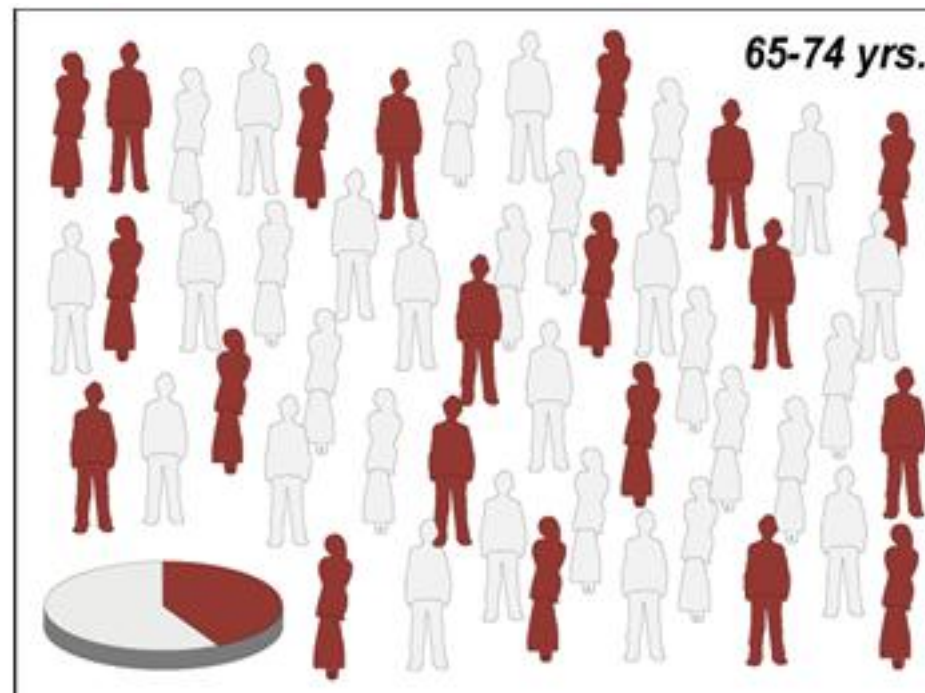
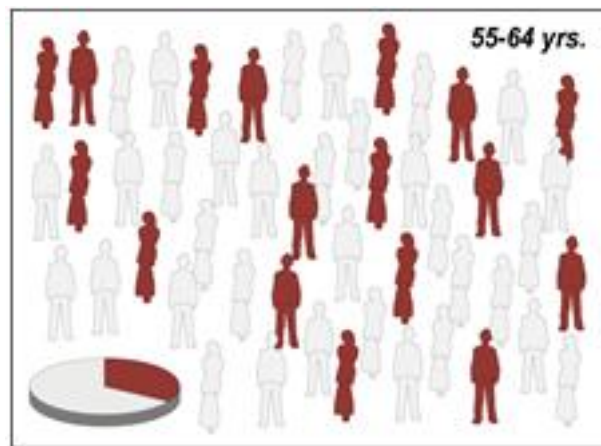
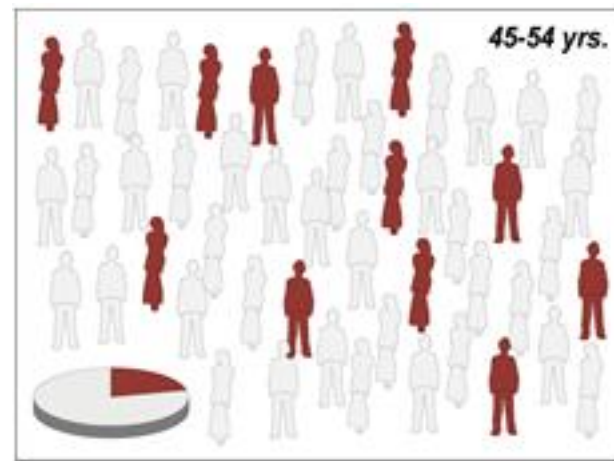
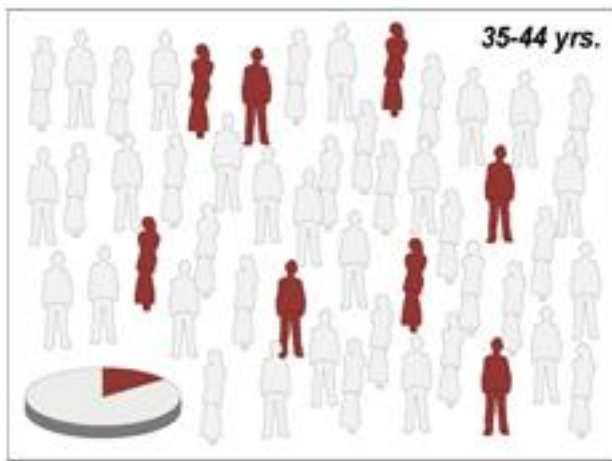
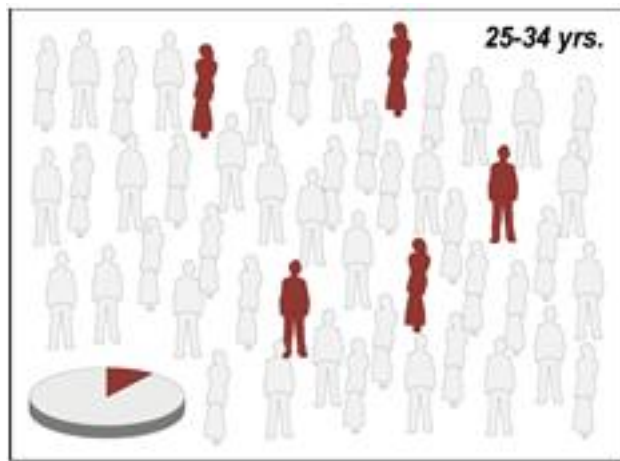
Capital city: Skopje - population 480,116 (2007)

1,069,432 Internet users as of Dec.31, 2011, 51.5% penetration, per ITU.

879,540 Facebook users on Dec 31/11, 42.3% penetration rate.

11.23 Mbps Broadband download speed on Nov.28, 2013, per NetIndex.

Age visualization



Defining contents

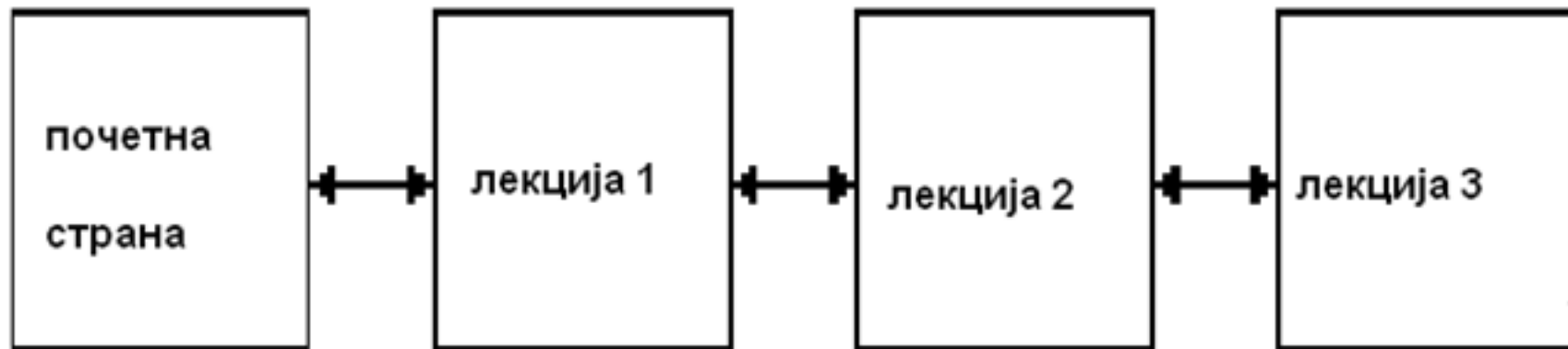
- What are the information that need to be shown
- What functionalities are necessary
- How should information be organized and grouped

Website design - structure

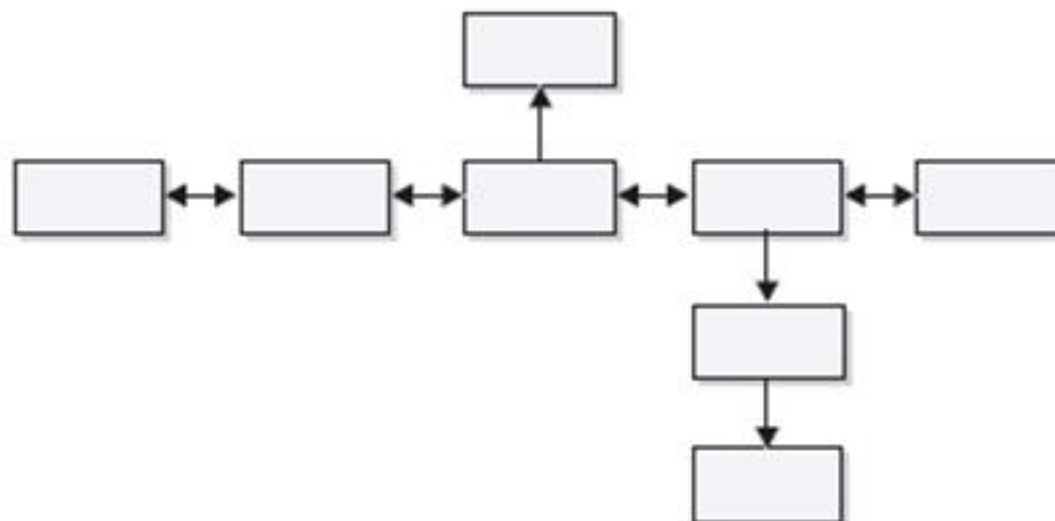
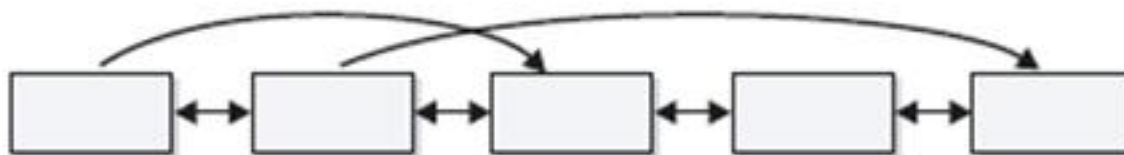
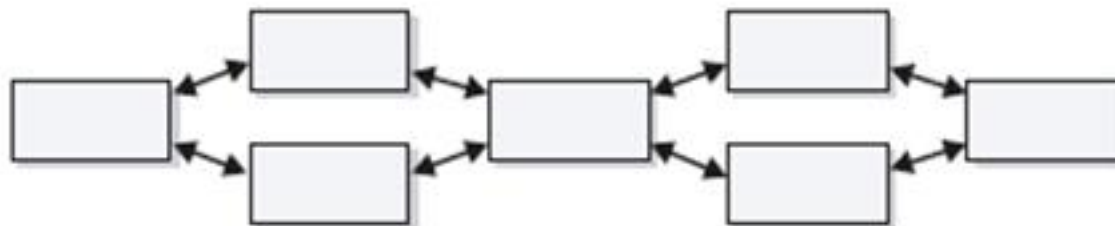
- ☐ Organization,
- ☐ Navigation,
- ☐ Functionality
- ☐ Efficiency
- The structure can be
 - ☐ linear,
 - ☐ hierarchical,
 - ☐ random access
 - ☐ mixed

Linear structure

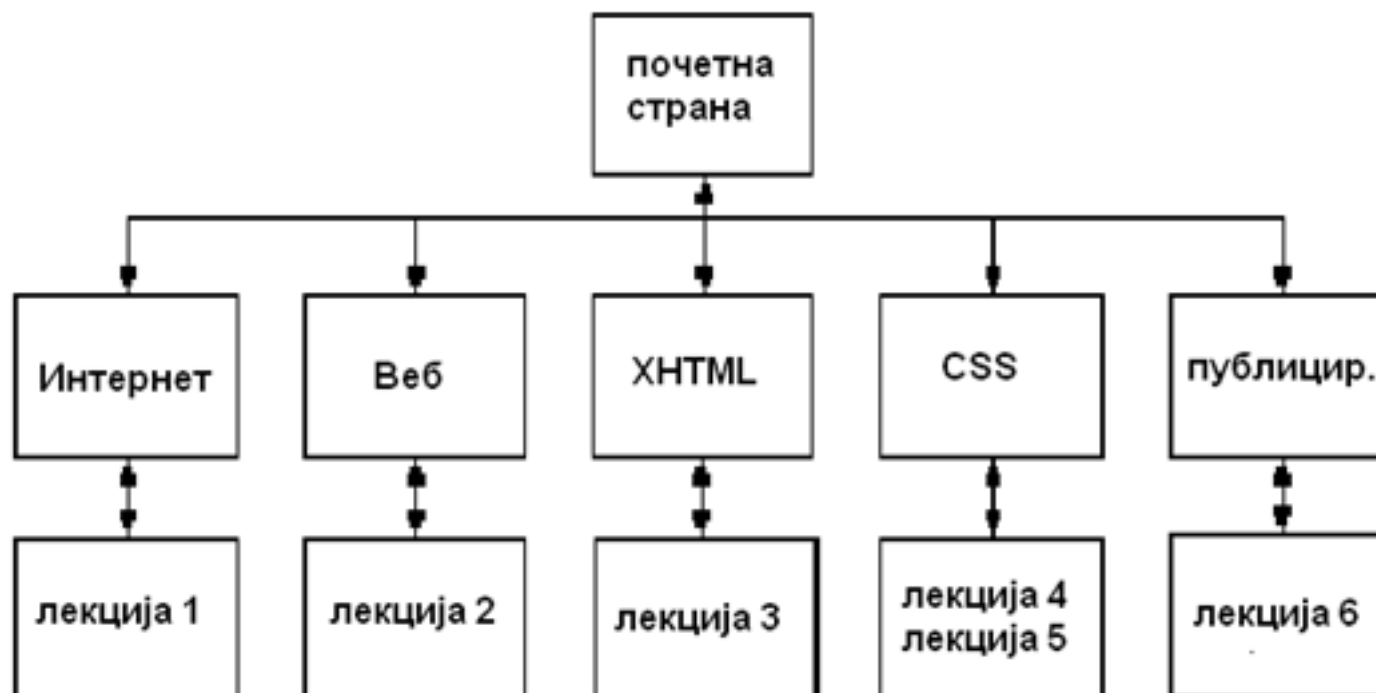
- Sequential
- Back and forth
- No jumps



Alternative linear



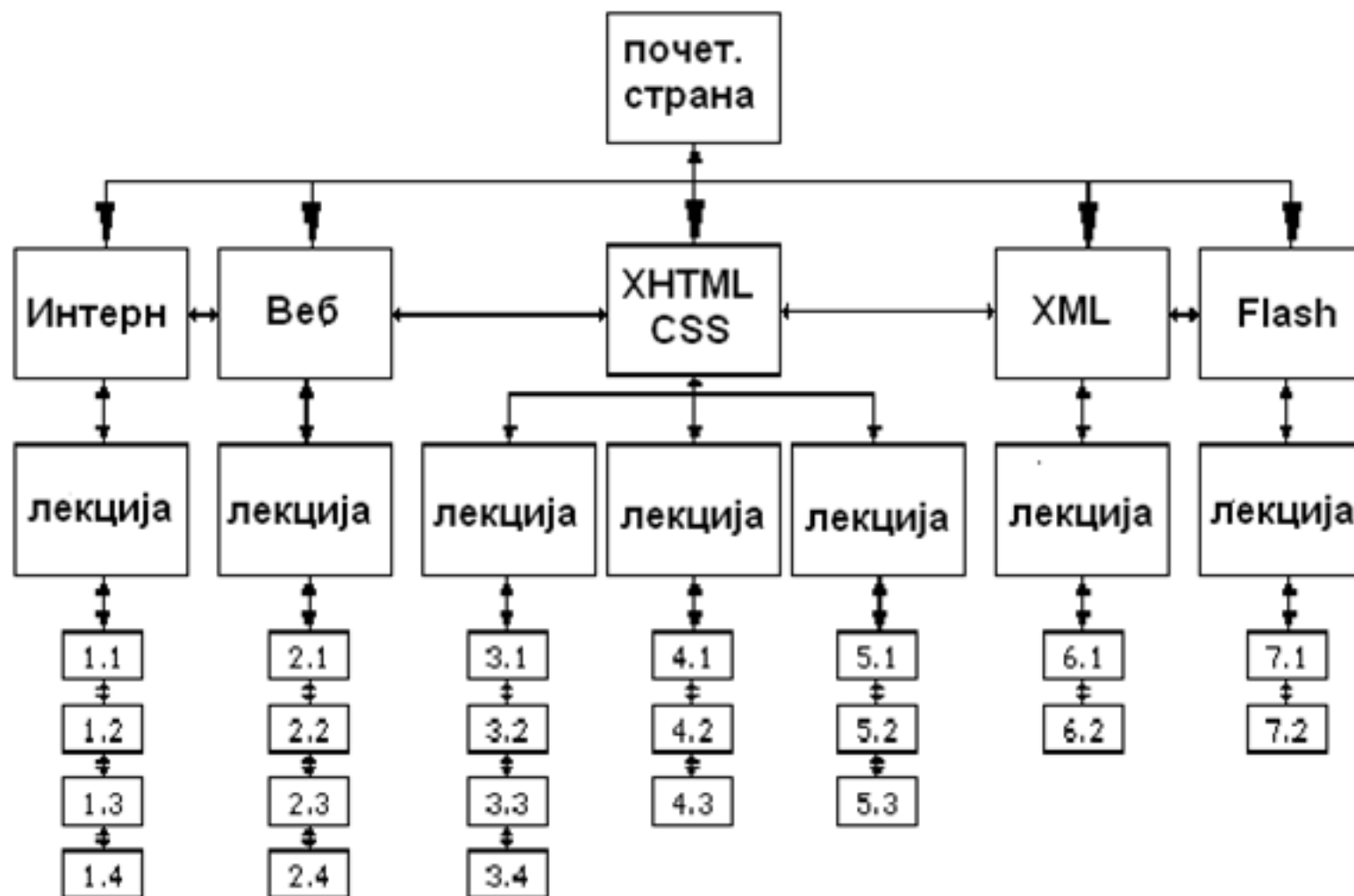
Hierarchical



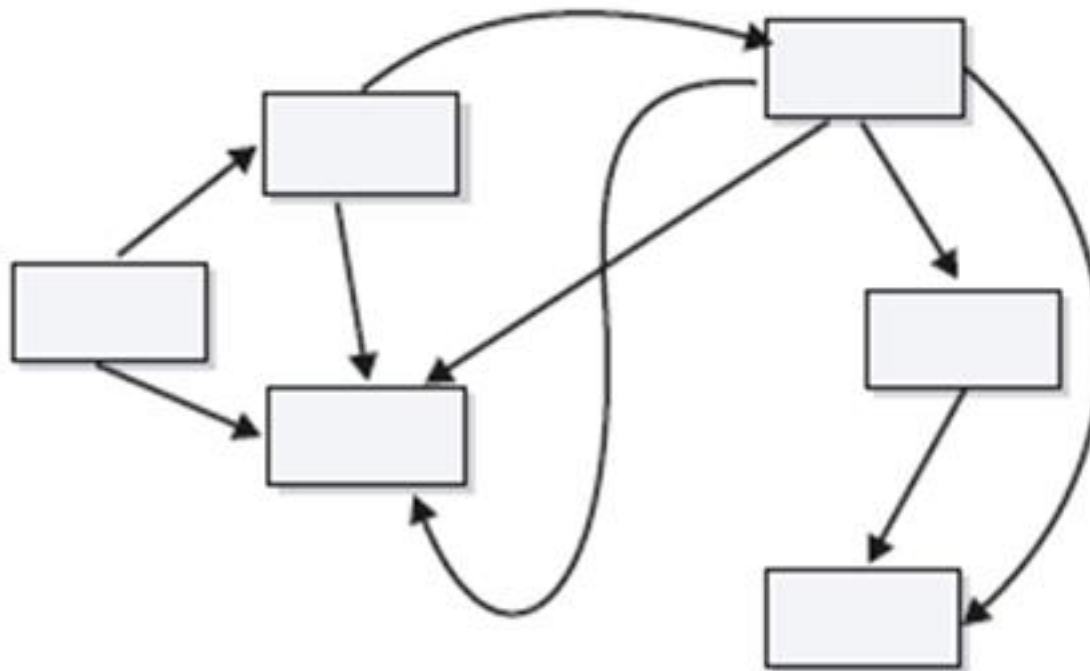
Random access



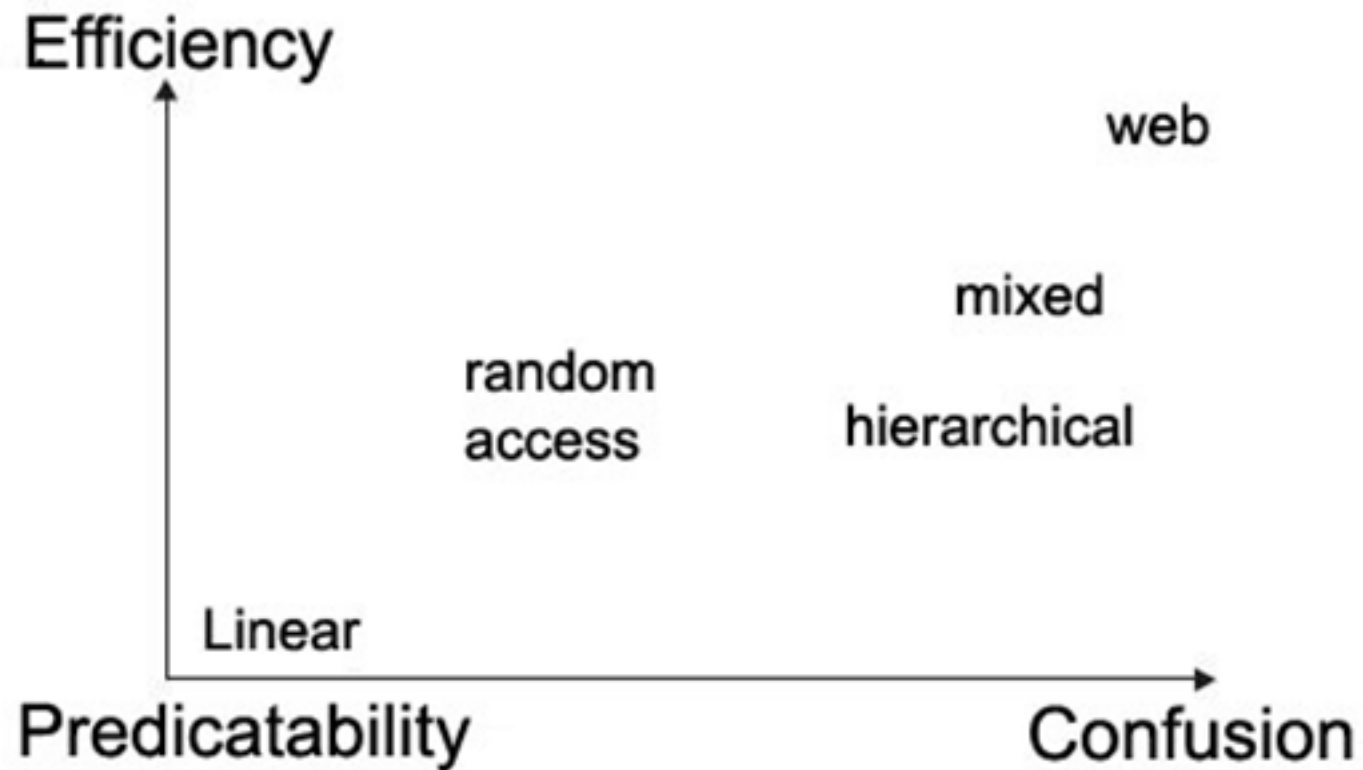
Mixed structure



Web structure



Structure comparisons



Functionalities

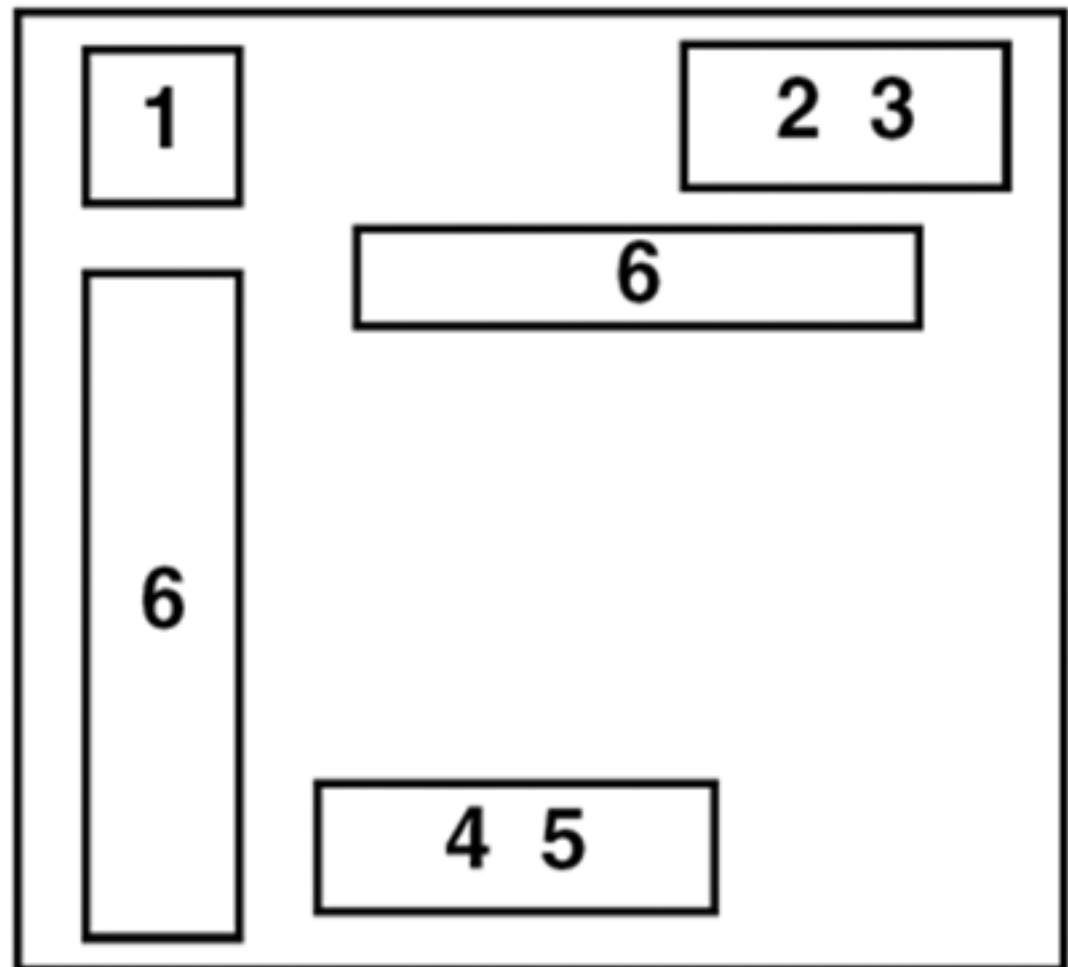
- Search
- Input forms
- Database
- E-commerce
- Login / accounts
- Audio and video
- etc

Webpage design

- Schematic of the layout and distribution of page content
- Page schematic
- Detailed model
- Web page prototype
 - Several web page type prototypes
 - Homepage
 - Section home
 - Details page

Usual layout

- Logo
- Exit
- Help
- About us
- Contact
- Navigation menus



Contrast

- Elements similar in size, shape and color create confusion
- Contrast attracts attention



Contrast types:

- size, position, color, texture, shape and orientation

големина



текстура



позиција



облик



боја



ориентација



Contrast



Contrast



Contrast



Contrast



Contrast



Contrast



Repetition

- Repeat colors, shapes, textures, spatial relations, lines, fonts, sizes, graphic concepts
- Repetition emphasizes the organization and compactness of the webpage



Repetition



Repetition



Repetition



Repetition



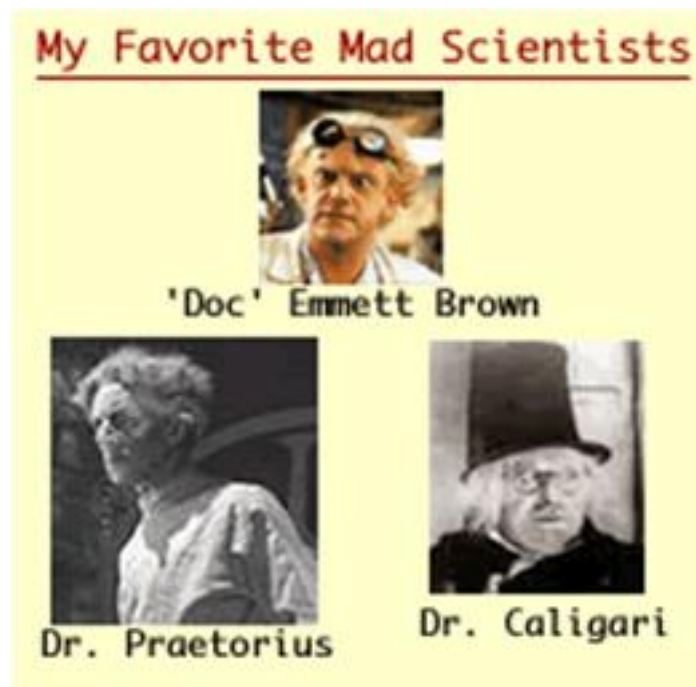
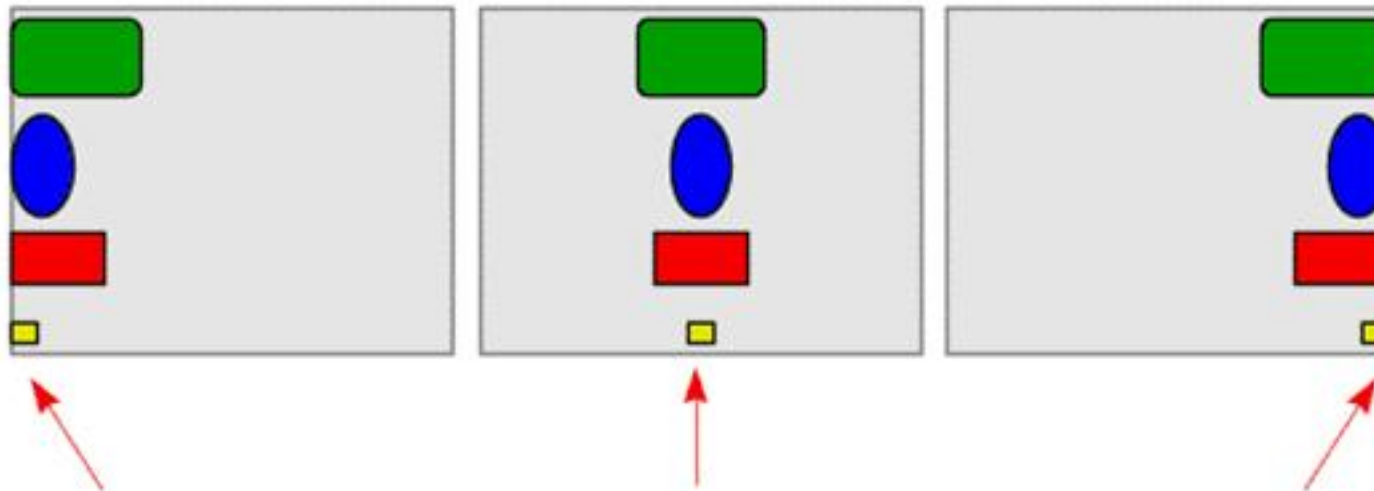
Repetition



Positioning



Beginners often center the design



Positioning creates visual groups



Positioning

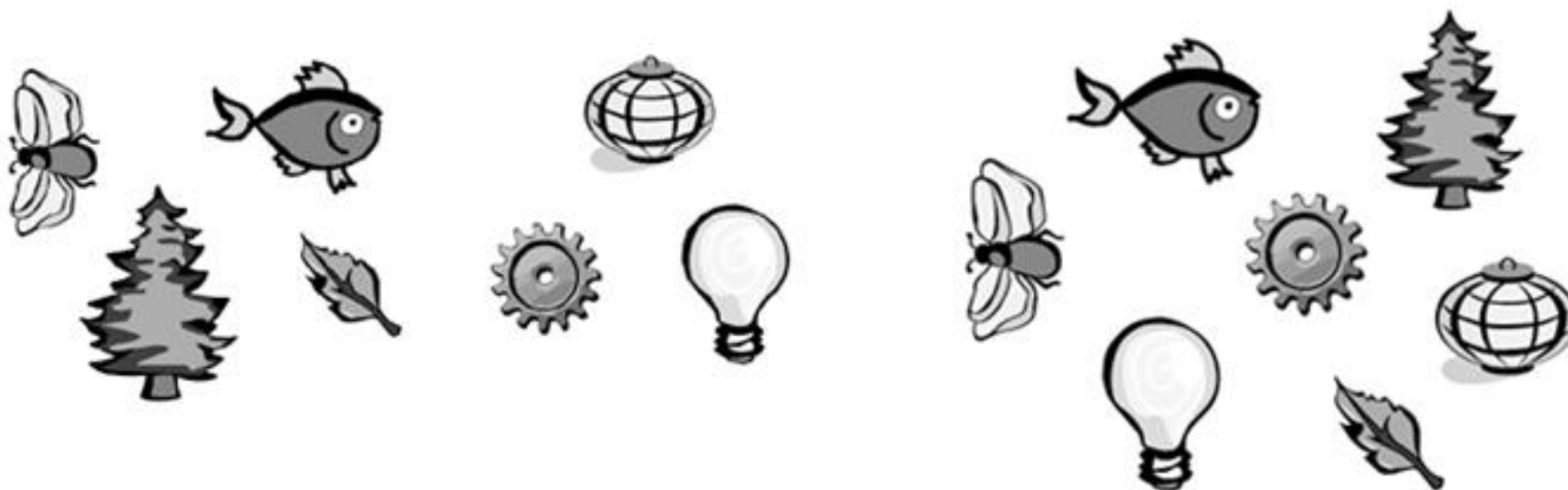


Positioning

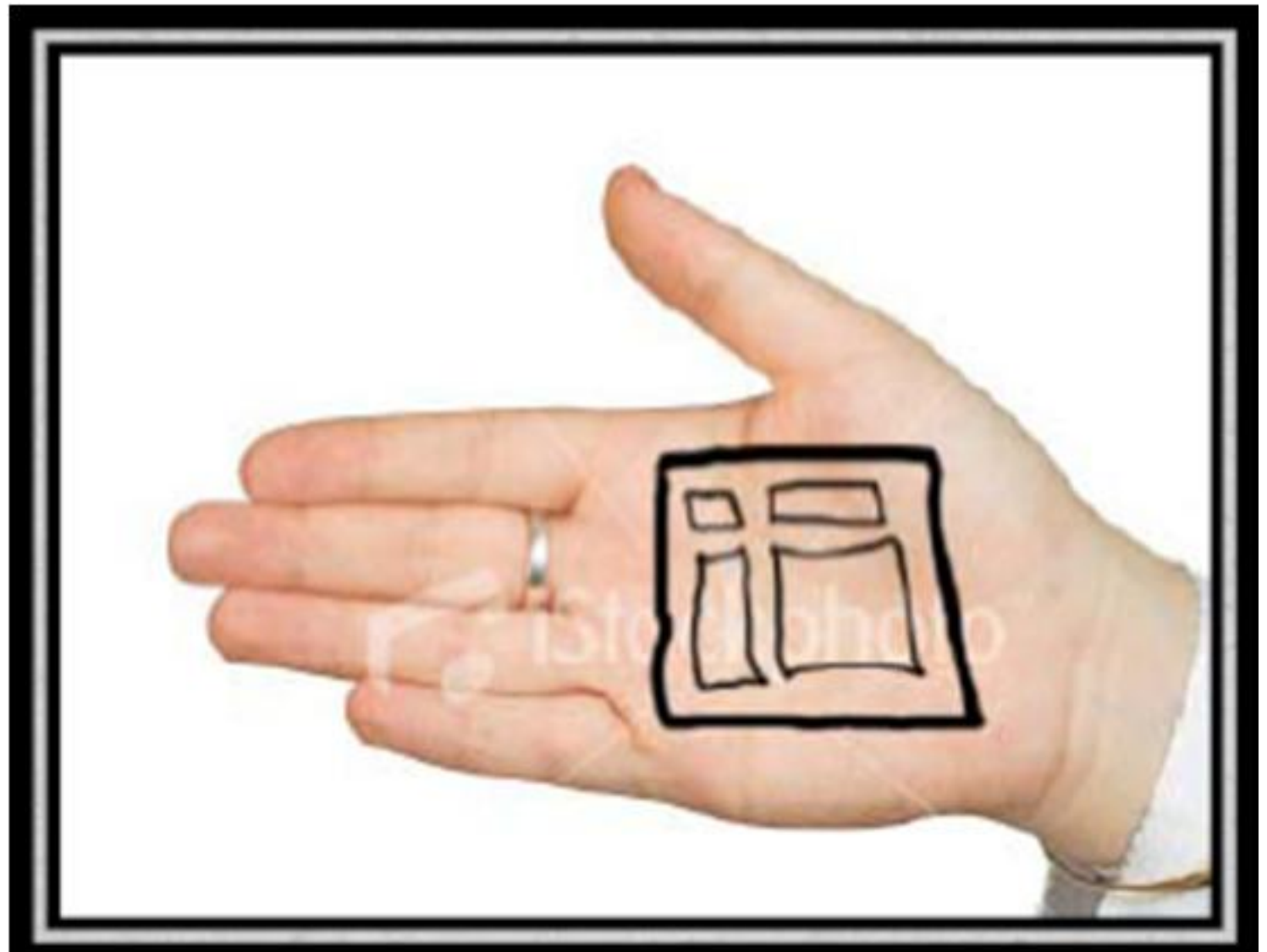


Proximity





Webpage schematics



Writing for web

- It's not like writing for books or other printer media
- People reading on the web do not behave like people reading a book
- You need to attract attention with the way the text is presented

Basic guidelines

■ Short texts

- ☐ People do not like big texts on the screen
- ☐ It's tiring
- ☐ Reading on the screen is 25% slower than reading from paper

■ Check text correctness (spellchecking)

■ Readability

- ☐ impatience
- ☐ 85% of readers scan texts

Reading pattern

- An average user scans the page for 7 seconds before deciding to continue or leave

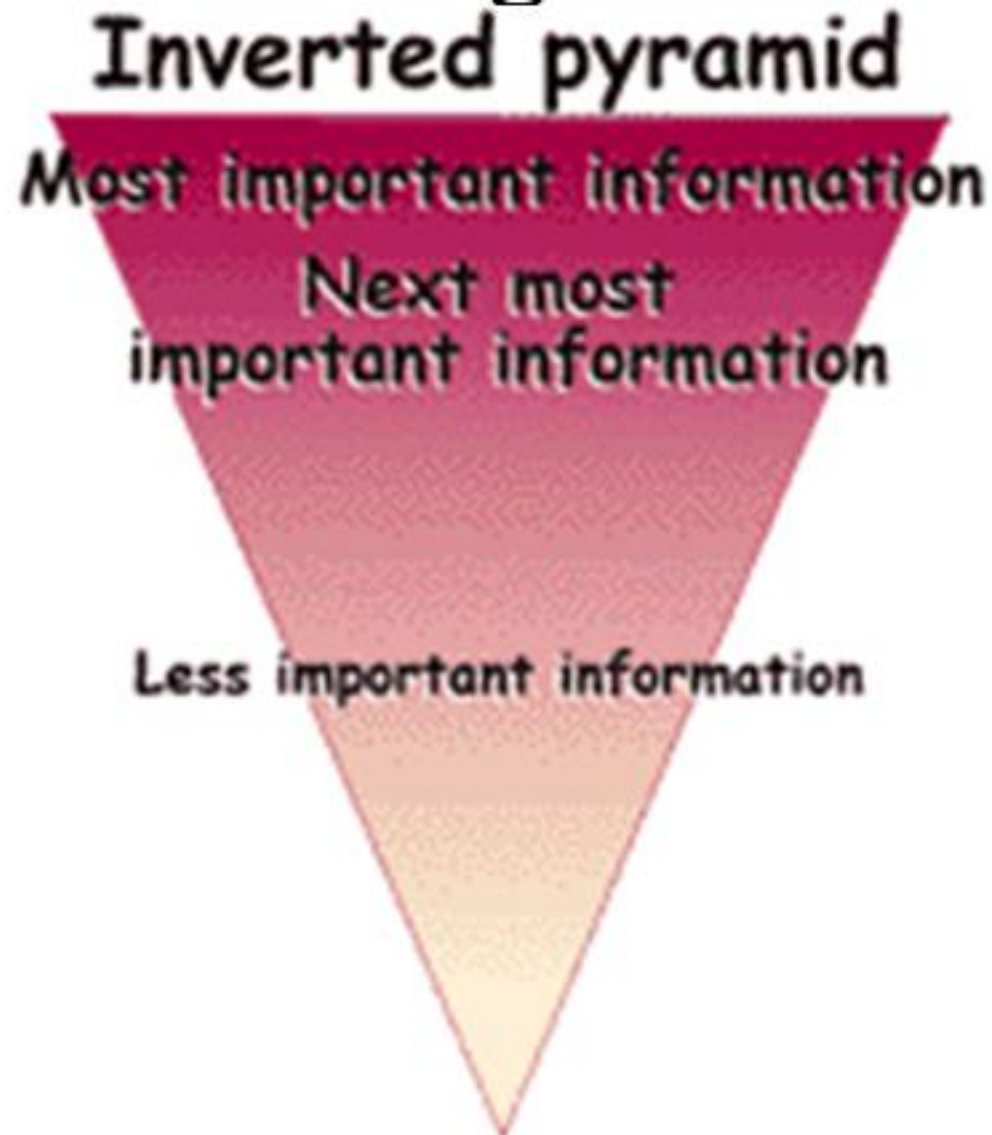


Eye tracking device results



Верзија	Пример параграф	Подоб.
Иницијално пишување	Охрид е исполнет со меѓународно познати атракции кои привлекуваат многу луѓе секоја година, без промашување. Во 2006, некои од најпосетуваните места беа Самоиловата тврдина (55,000 посетители), Црквата Св Климент и Св. Пантелејмон на Плаошник (32,166), споменикот на Св Кирил и Методиј (10,000), новооткриениот споменик на Св Климент(6,598), манастирот Св. Наум (6,002), галеријата на икони во црквата Св Богородица Перивлептос(2,446).	0%
Концизен текст	Во 2006, шест од најпосетуваните атракции во Охрид беа Самоиловата тврдина, Црквата Св Климент и Св. Пантелејмон на Плаошник, споменикот на Св Кирил и Методиј, новооткриениот споменик на Св Климент, манастирот Св. Наум, галеријата на икони во црквата Св Богородица Перивлептос.	58% подобро
Скенибиле н распоред	Охрид е исполнет со меѓународно познати атракции кои привлекуваат многу луѓе секоја година, без промашување. Во 2006, некои од најпознатите места беа: <ul style="list-style-type: none"> Самоиловата тврдина (55,000 посетители) Црквата Св Климент и Св. Пантелејмон на Плаошник (32,166) Споменикот на Св Кирил и Методиј (10,000) Новооткриениот споменик на Св Климент (6,598) Манастирот Св. Наум (6,002) Галеријата на икони во црквата Св Богородица Перивлептос (2,446) 	47% подобро
Објективен јазик	Охрид има неколку атракции. Во 2006, некои од најпосетуваните места беа Самоиловата тврдина, Црквата Св Климент и Св. Пантелејмон на Плаошник, споменикот на Св Кирил и Методиј, новооткриениот споменик на Св Климент, манастирот Св. Наум, галеријата на икони во црквата Св Богородица Перивлептос.	27% подобро
Комбинира на верзија	Во 2006, шест од најпосетуваните места во Охрид беа: <ul style="list-style-type: none"> Самоиловата тврдина Црквата Св Климент и Св. Пантелејмон на Плаошник Споменикот на Св Кирил и Методиј Новооткриениот споменик на Св Климент Манастирот Св. Наум Галеријата на икони во црквата Св Богородица Перивлептос 	124% подобро

Recommended design





What is Typography?

- Dictionary.com: The art and technique of printing with **movable type**.
- Wikipedia: The art and technique of selecting and arranging **type styles, point sizes, line lengths, line leading, character spacing, and word spacing** for typeset applications. These applications can be physical or digital.
- Web Style Guide: The balance and interplay of letterforms on the page, a verbal and visual equation that **helps the reader understand the form and absorb the substance of the page content**.

Type



- Serif: stroke at the ends of a letter
- Sans Serif: without serifs
- Leading: vertical space between baselines
- Kerning: horizontal space between letters

Typography for the web

- **Legibility:** good typography depends on visual contrast between fonts, text blocks, headlines, space
 - Alignment: margins → unity; white space → visual relief
 - Line length: columns, invisible tables
 - Typefaces: Georgia & Verdana for screen
 - Case: upper + lower
 - Emphasis: italics, bold...
- **Consistency:** create harmonic structure, predictable
- **Accessibility:**
 - Size: use relative units, offer text-only version
 - Color: contrast

Understanding Type Design Principles

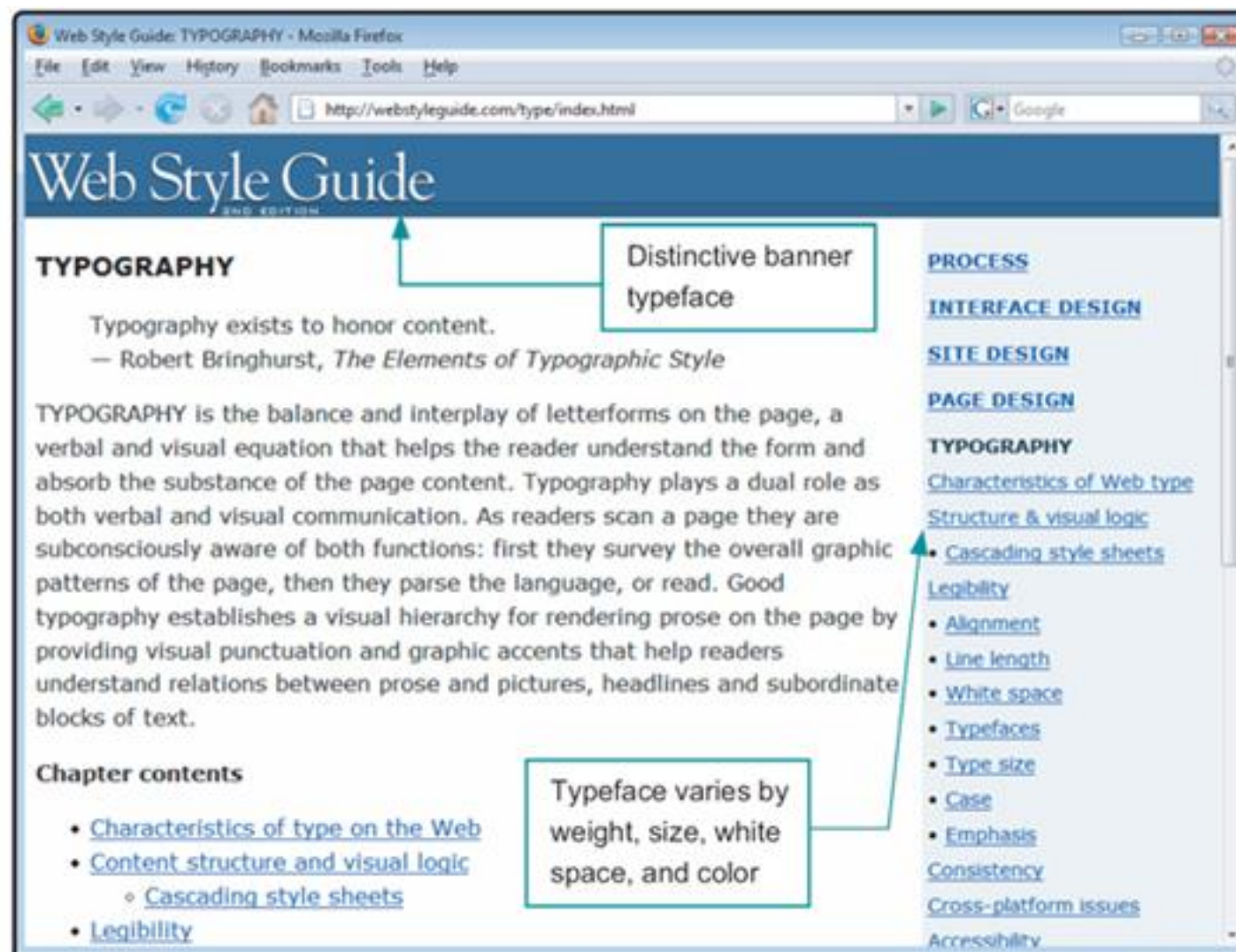
- Choose fewer fonts and sizes
- Choose available fonts
- Design for legibility
- Avoid using text as graphics

Choose Fewer Fonts and Sizes

- Your pages will look cleaner when you choose fewer fonts and sizes of type
- Decide on a font for each different level of topic importance, such as page headings, section headings, and body text
- Communicate the hierarchy of information with changes in the size, weight, or color of the typeface

Figure 7-1

Effective typographic
design



Use Available Fonts

- The user's browser and operating system determine how a font is displayed
- To control more effectively how text appears on your pages, think in terms of font families, such as serif and sans-serif typefaces



Figure 7-2

Serif and sans-serif
type



Serif



Sans-serif

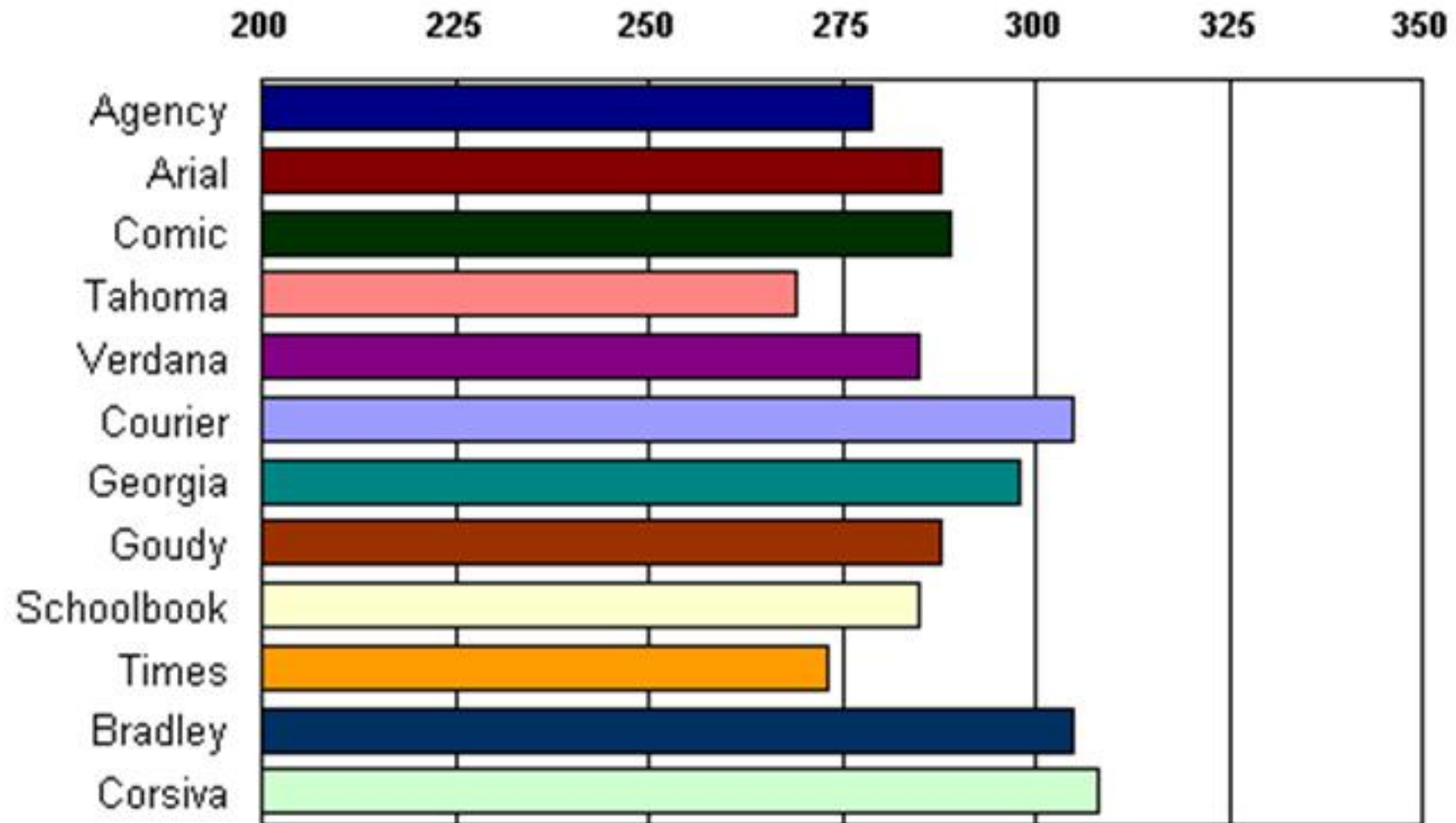


Common PC Fonts	Common UNIX Fonts	Common Macintosh Fonts
Arial	Helvetica	Helvetica
Courier New	Times	Courier
Times New Roman		Palatino
Trebuchet MS		Times
Verdana		Verdana Arial

Table 7-1 Common installed fonts

FONTFACE %	
Times New Roman	99
Arial	99
MS Sans Serif	88
Courier	82
Impact	78
Wingdings	76
Verdana	75
Comic Sans MS	73
Arial Black	72
Garamond	67
Arial Narrow	66
Tahoma	64
Georgia	58
Basset	57
Courier New	57
Century Gothic	55
Desdemona	55
Braggadocio	54
Algerian	52
Century Schoolbook	50

Font reading speed

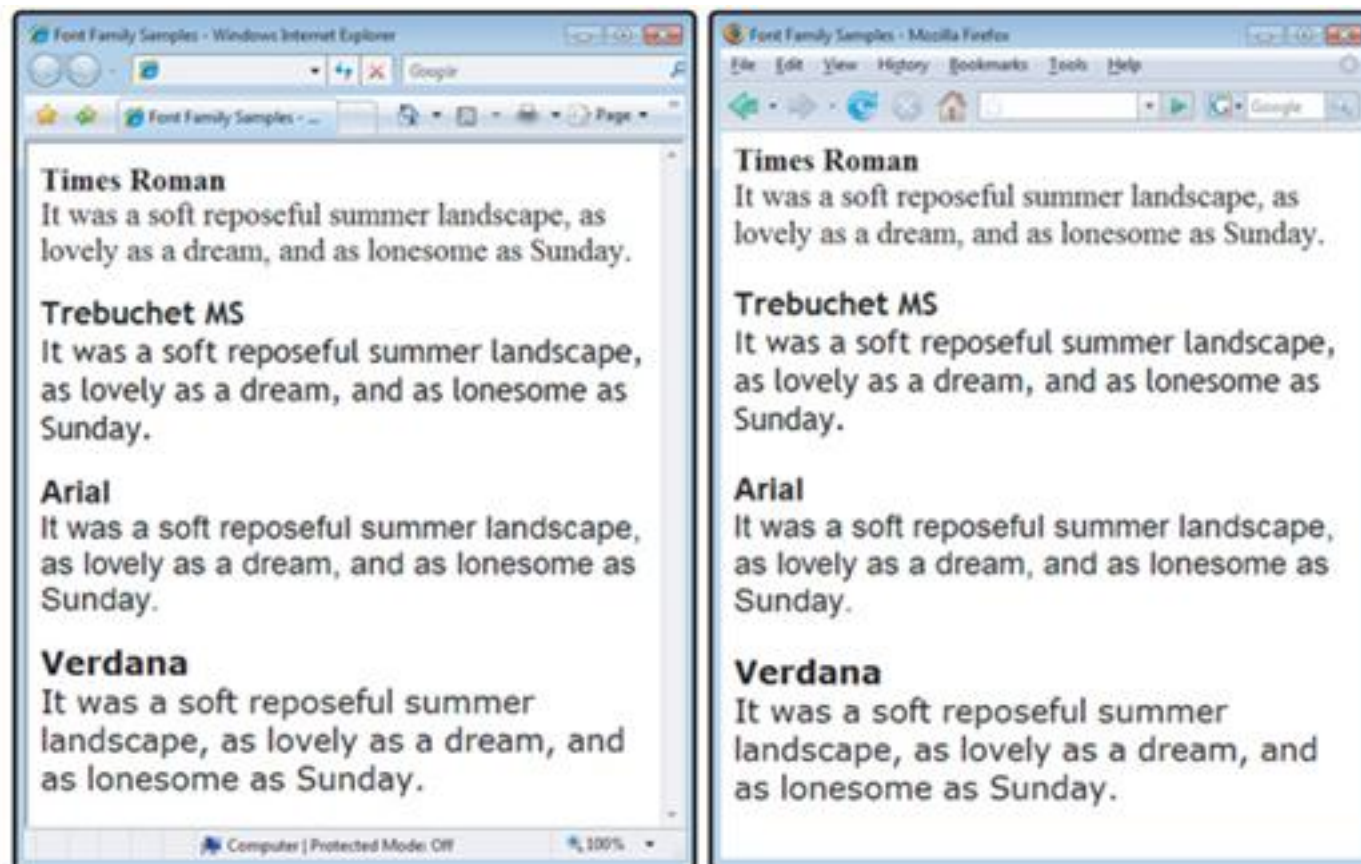


Design for Legibility

- Figure 7-3 shows the same paragraph in Times, Trebuchet, Arial, and Verdana at the default browser size in both Internet Explorer (on the left) and Mozilla Firefox
- Notice that subtle variations in the weight, spacing, and rendering of the font families affect the way each is displayed to the user

Figure 7-3

Common Web font families in Internet Explorer and Firefox



Avoid Using Text as Graphics

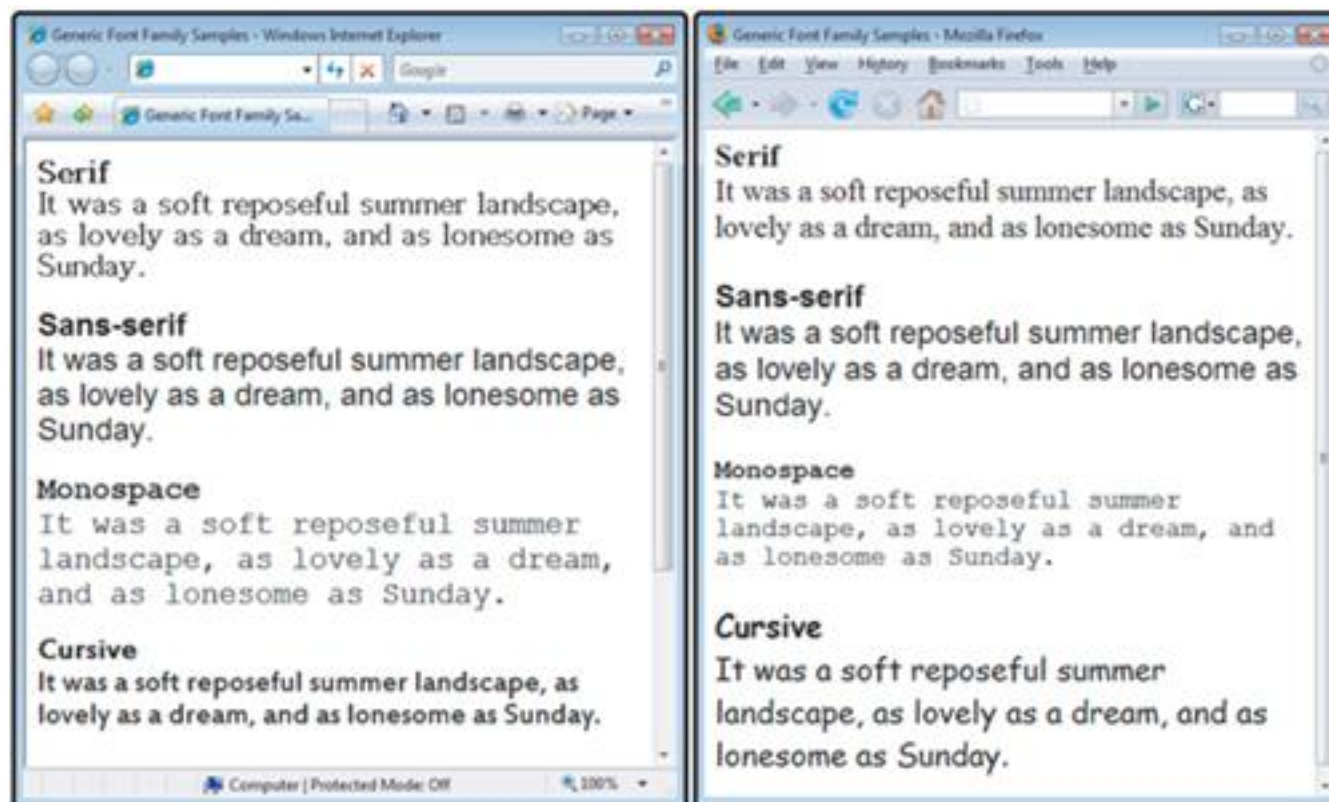
- Save text graphics for important purposes, such as the main logo for your page or as reusable navigation graphics
- Remember that including text as graphics means users cannot search for that text
- Whenever possible, use HTML-styled text on your pages

Relative Units in CSS

- Enables scalable Web pages that adapt to different display types and sizes
- Recommended method for Web page design
- Relative measurement values such as em and px are designed to let you build scalable Web pages that adapt to different display types and sizes
- The W3C recommends that you always use relative values
- For the computer screen, ems, pixels, or percentage measurements can scale to the user's preferences

Figure 7-5

Generic font families in
Internet Explorer and
Firefox



Summary

- Use type to communicate information structure; be sparing with your type choices, and use fonts consistently
- Remember that HTML text downloads faster than graphics-based text; use HTML text whenever possible
- Use browser-safe fonts that will display as consistently as possible across operating systems

Summary (continued)

- Standardize your styles by building external style sheets and linking them to multiple documents
- Test your work; different browsers and computing platforms render text in different sizes
- Use type effectively by choosing available fonts and sizes; design for legibility and use text to communicate information about the structure of your material

Summary (continued)

- Use the font properties to control the look of your letter forms
 - Specify font substitution values to ensure that your text is displayed properly across different platforms
- Use the text spacing properties to create more visually interesting and legible text