Presenting Content on the Web

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WHOI Web
Understanding Web Users

Difference between the TV & Web
Lean-back vs. lean-forward

❑ **TV is a passive medium**
  ❑ Users want to be entertained, relaxation mode & vegging out
  ❑ Little to no user initiative
  ❑ Viewing TV can be a social environment

❑ **Web is an active medium**
  ❑ Users are engaged, want to go places, want to get things done
  ❑ Allows for interaction, user initiative & empowerment
  ❑ Viewing web is solitary environment

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User behavior: F shaped pattern
2006 NNG eye-tracking study

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Implications of the F-pattern

❑ Users won't read your text thoroughly
  ❑ Reading from computer screens 25% slower than from paper
  ❑ 79% of users scan the page instead of reading word-for-word
  ❑ Web content should be 50% the word count of paper equivalent

❑ The first two paragraphs must state the most important information

❑ Start subheads, paragraphs and bullet points with information carrying words

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Difference between the Web & Print
❑ **Print**
  ❑ Often linear
  ❑ Author-driven
  ❑ Storytelling
  ❑ Sentences
  ❑ Non-interactive

❑ **Web**
  ❑ Non-linear
  ❑ Reader-driven
  ❑ Ruthless pursuit of actionable content
  ❑ Content fragments
  ❑ Allows for interaction, user initiative & empowerment

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How little do users read?
❑ On average users have "time" to read *at most* 28% of the words

Most used features on the Web
❑ Clicking hypertext links
❑ Clicking buttons on a page
❑ Back button

Harald Weinreich, Hartmut Obendorf, Eelco Herder, and Matthias Mayer: "Not Quite the Average: An empirical Study of Web Use," in the *ACM Transactions on the Web*, vol. 2, no. 1 (February 2008), article #5.

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Writing for the Web: text formatting

❑ Short paragraphs
  ❑ Long paragraphs send a signal to the reader: "This will require effort"
  ❑ Short paragraphs: "I'm easy! Read me!"

❑ Headings should make absolutely clear what the page contains

❑ Use subheadings if text exceeds ~300 words
  ❑ Will help the reader scan the page efficiently

❑ Words or phrases in boldface can help readers find what they want
  ❑ Note: combining subheads and boldface can create visual noise, don't overdo it

❑ Lists help users make sense of information on page

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ORIGINAL
Whether intended to service a single person or an entire enterprise, all of these systems share some fundamental requirements -- they must be reliable (when was the last time you rebooted your phone?), secure, accommodate future functional integration and service changes via software, thrive in a distributed network, support multiple tasks, increasingly have real-time response, and all while remain price-sensitive. And perhaps most importantly, applications created to run on these systems must be easily portable. Already, nearly half of such systems have more than one processor, and almost half employ more than one architecture.

Sun's Java™ language, as well as the applications its compilers create, answer many of the above requirements from the software side. First, it's simple. Java was designed as closely to C++ as possible in order to make the system more understandable, but omits many rarely used, poorly understood and otherwise confusing features of C++. Second, it produces small code. One of the goals of the Java language is to enable the construction of software that can run on a stand-alone basis in small machines. The size of the basic interpreter and class support is about 40 kbytes; adding the basic libraries and thread support (essentially a self-contained microkernel) adds an additional 175 kbytes.

Third, it's object oriented. This facilitates the clean definition of interfaces and makes it possible to provide reusable software components. Fourth, it's distributed. Java has an extensive library of routines for coping easily with TCP/IP protocols like HTTP and FTP. Further, Java applications can open and access objects across a network via URLs with the same ease programmers are used to when accessing a local file system.

REWRITTEN
Whether intended to service a single person or an entire enterprise, future network-computing systems share some fundamental requirements. They must be reliable, provide security, accommodate future service changes via software, operate in a distributed network, support multiple tasks, respond in real time, and remain price-sensitive. And perhaps most important, applications created to run on these systems must be easily portable.

Sun's **Java** language meets many of the above requirements from the software side:

1. It's **simple**. Java was designed as closely to C++ as possible, to make the system more understandable. But Java omits many rarely used and confusing features of C++.
2. It produces **small code**. One goal of Java is to enable construction of software that runs on a stand-alone basis in small machines. The size of the basic interpreter and class support is about 40 kbytes; the basic libraries and thread support add 175 kbytes.
3. It's **object-oriented**. This facilitates the clean definition of interfaces and makes it possible to provide reusable software components.
4. It's **distributed**. Java has an extensive library of routines for coping easily with TCP/IP protocols like HTTP and FTP. Also, Java applications can open and access objects across a network via URLs with the same ease programmers are used to when accessing a local file system.

Task thoughput: +180%   Memorability: +100%

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Writing for the Web: content

❑ Write for a single reader rather than an audience
❑ Provide as much context as possible
❑ Anticipate and answer your reader's questions
❑ Take your reader on an interesting and well-considered journey
❑ Avoid jargon & marketese

Strive for usable content
❑ Clear and easy to understand
❑ Meaningful
❑ Makes the reader feel smart
❑ Fresh, light, and lively
❑ Organized in such a way that users can get their mind around it
❑ Encourages feedback and engineered for conversation

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Presenting your story: Using multimedia

❑ Multimedia is media that utilizes a combination of different content forms
  ❑ Text
  ❑ Audio
  ❑ Still images
  ❑ Animation
  ❑ Video
  ❑ Interactivity

❑ Can be linear (e.g. video) or non-linear (e.g. clickable diagram)

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Text versus multimedia: study results

❑ 2003 Poynter Institute & Eyetools, Inc tested 25 individuals to study recall of information presented in text and in multimedia

❑ Worked with New York Times to rework two stories
  ❑ Created two versions of each stories
    ❑ Web friendly text version
    ❑ Interactive multimedia version
  ❑ Three to five minute experiences

❑ Test participants answered a series of recall questions

Story 1 – text | multimedia
Story 2 – text | multimedia

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Presenting your story: text versus multimedia

❑ Text version better for recalling information about
  ❑ Names & places
  ❑ Specific factual information

❑ Multimedia version better for recalling and learning information about a process or procedure that was unfamiliar

Telling your story
Multimedia on the web

What multimedia you can use to help tell your story:

❑ Photographs
❑ Audio files
❑ Audio Slideshows
❑ Videos
❑ Illustrations
❑ Flash interactives

Telling your story
Multimedia on the web

You can present your story by:

❑ Using a combination of text and photos
❑ Using a combination of text, photos, and illustrations
❑ Using an audio slideshow
❑ Using a combination of text and videos/animations
❑ Using a combination of all of the above

Photography Tips
Multimedia on the web

Some photography tips

❑ Move! Take many shots of your subject from different angles
❑ Use a plain background for stills, or move in close to remove it
❑ Take wide, middle, and close up shots. Variety gives you choices.
❑ The subject does not always have to be in the middle
❑ Use flash outdoors
❑ Be aware of the light, bright sun casts long shadows on faces
❑ Be aware of color
❑ Be a director, move your subjects if you need to
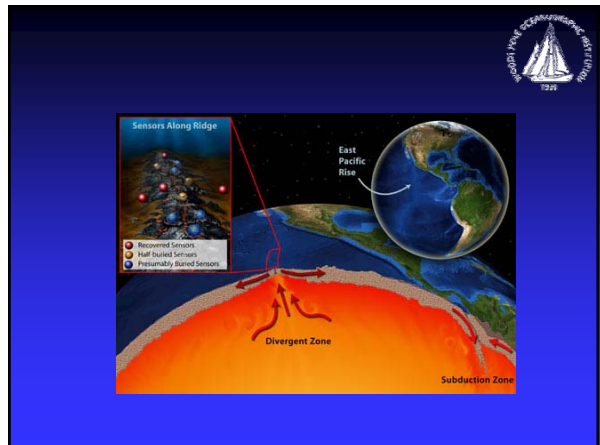❑ Can you think of more?
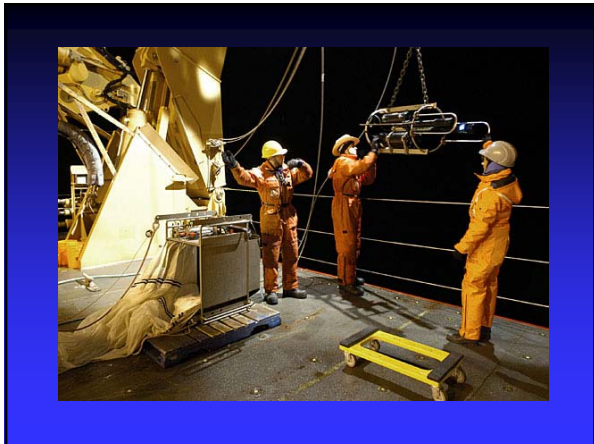
Illustrations

Multimedia on the web

When to use them
- ❑ There's no way to take a photo of the subject (at the bottom of the ocean for example)
- ❑ To explain complex processes or cycles
- ❑ Text alone couldn't possibly explain it
- ❑ To show intricate details otherwise unseen
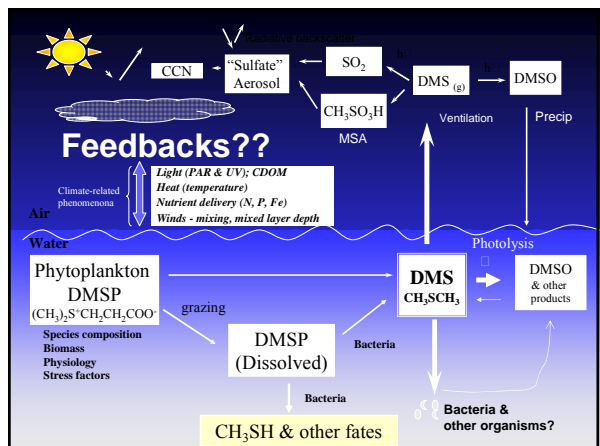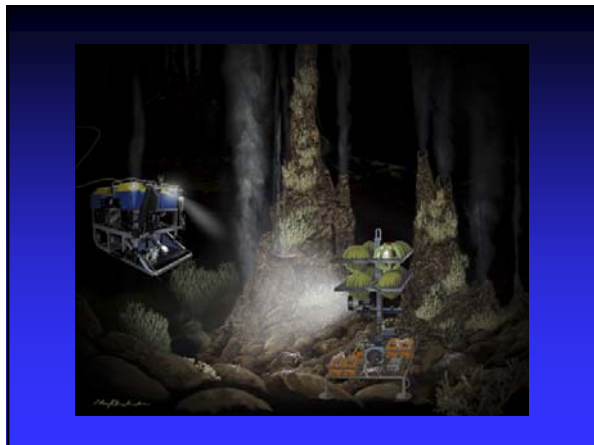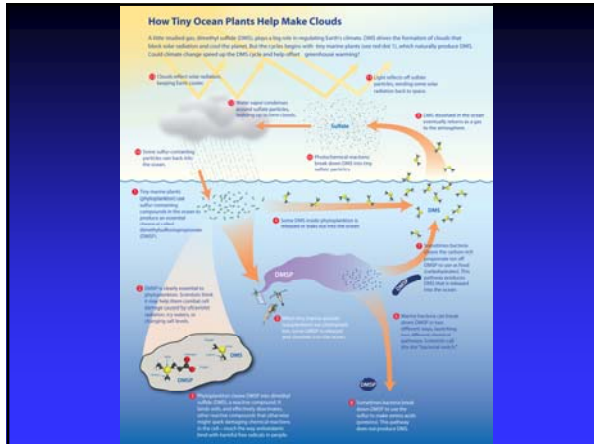- ❑ Conceptual ideas
- ❑ Can you think of other reasons?

Flash Interactive Tips
Multimedia on the web

Some interactive tips

❑ When an illustration is too busy, make the text clickable
   Example
❑ If you want an object to move and describe at the same time
   AUV navigation
❑ Illustrate a comparison: Cheetahs of the deep
   or National Geographic
❑ The Carbon Cycle

Audio Slideshow Tips
Multimedia on the web

Some audio slideshow tips

❑ Shoot photos like a video sequence. Take wide, medium, and tight shots.
❑ Open the show with natural sound to ramp up your story
❑ Never have dead air sound gaps (cross fade or use room tone)
❑ Make sure your audio edit is smooth
❑ Pace the show. Too fast, the viewer gets mad, too slow and they're bored
❑ Weave natural sounds and narrative. Don't have your subject drone on and on for three minutes without stopping.

❑ An example: Amber earns a paycheck
❑ An example from a former JP student: ADOVAH

Audio Tips
Multimedia on the web

Some audio tips

- ❑ Use a quality microphone. A camcorder's audio isn't the greatest.
- ❑ Limit background noises during narration.
  Shut windows, turn off fans, etc.
- ❑ Record background sounds. This is useful for videos and audio
  slideshows to provide mood and give depth.
- ❑ Watch out for wind. Buy a wind protector, or put a sock on it.
- ❑ Record your voice in a quiet space.

Video Tips
Multimedia on the web

Some video tips

- ❑ Read the manual. Know what all the controls do.
- ❑ Lay off the zoom. Too much of this results in dizziness.
- ❑ Don't use effects. Save that for the edit.
- ❑ Bring a tripod. After a few minutes of handheld, well, you've seen it
- ❑ Get a microphone. The typical camcorder's microphone isn't great
- ❑ Shoot lots of extra. Better to have too much and edit out.