

Principles for Designing Multimedia

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PRINCIPLE 1: FORM FOLLOWS FUNCTION (CONTENT)

- Creating multimedia content:
 - More than writing code or displaying pictures
- You are trying to convey a specific type of information or to help the user accomplish a specific mission
 - IN THE EASIEST AND MOST INTUITIVE manner possible
- The form of your content should facilitate this process, it cannot be a goal by itself
 - The cool factor is important but only if subordinated to your main mission

PRINCIPLE 2 DISCOVER AND DEFINE THE FUNCTION OF YOUR MULTIMEDIA PRODUCT

- What do you want to accomplish with this content?
 - Possible types of content:
 - Informational
 - Entertainment
 - Task-oriented (perform a service, sell a product, etc)
 - For each type of content there should be a specific mission:
 - ON-LINE CONTENT
 - NEWSPAPER – to provide in a web environment “all the news that’s fit to print”
 - E-commerce/Corporate: to sell products and create identity
 - GAMES, MOVIES: To transport you to a make-belief world
- Define the content in a user-centric manner
 - Function and mission should be defined not in the abstract, but in view of satisfying an expected viewer/user
 - Who is going to be my typical user?

PRINCIPLE 3: LESS IS MORE

Offer on the “front-page” gateways for each major type of user, organized around a common theme

- For most real world and corporate content products missions are multiple and users diverse
- Organize the content around a single, clear information path with possible jump-off points

PRINCIPLE 4: ORGANIZE CONTENT HIERARCHICALLY

Draft pre-design lists of elements that your imagined typical user will need on the content platform

- Organize the lists (information clumping)
 - Hierarchically
 - By class (type)
 - Alphabetically
 - Chronologically

PRINCIPLE 5: SUBVERT HIERARCHY

Do not get bogged down in very intricate hierarchical/nested pages

- Give access to as many elements on your content as possible
- MOST IMPORTANT: Display or link most important information right from the beginning
- HAVE THE USER IN YOUR MIND ALL THE TIME

PRINCIPLE 6: DEGRADE GRACEFULLY

- You never have complete control over the way in which the viewer will see your content
 - Construct content around a simple and sturdy basic structure, use simple protocols and widely accepted content formats.
 - Familiarity and usability of a format takes precedence over “cool” factors, unless the technology you are proposing is truly revolutionary

PRINCIPLE 7: A PICTURE IS WORTH A THOUSAND WORDS & A MOVING IMAGE EVEN MORE PROVIDED

- The picture is good, appropriate for the context and does not get in the way
- The movie is short, well edited and conveys a message
- Images are complemented by text, music, sound, to make the experience complete

PRINCIPLE 8: USE CONVENTIONS AND STICK TO THEM

Use conventional colors for different sections

- Use icons and clip-art consistently
- Be conservative: use pre-existing metaphors, do not invent new ones unless they are very, very, very compelling
 - For navigation:
 - Links and buttons that go to links should look like navigation devices
 - Label everything clearly and in plain English (abstain from cute nicknames)
 - Use icons with caution

PRINCIPLE 9: PLACE THE content IN SPACE AND TIME

Include on interface, especially in informational contents:

- When was the content created
- What geographic or spatial area it is related to
- Location and contact modalities for all people, organizations, etc. mentioned in the content that you think would benefit from being contacted

PRINCIPLE 10: USE SOUNDBITES AND KEYWORDS

Stuff the text with the words you would like the people to remember and nothing more

- Use words in the text people might use in a search on Google

PRINCIPLE 11

- NEVER MATCH COLORS ON YOUR content THAT YOU WOULD NOT MATCH IN YOUR CLOTHING
 - Avoid clashing colors / use complementary colors
 - Use a limited color palette for each interface
 - For interfaces with a lot of text that is meant to be read in more than a few seconds use black text on white background
 - Link the body of the text off the main screen
 - Use a colors to mark section and level in the section
 - Use red like animals do, as a sign of attractiveness or danger
 - Use black for stylish, high contrast contents, do not use for regular, text rich contents

The planning process

- Some of the information you need for defining the content is **obvious, some is not**
- Before starting on creating the content **you have to spell out** everything you need to know yourself about the subject the content refers to
- This will **help you formulate** the mission of the content, its audience, its functionality and scope

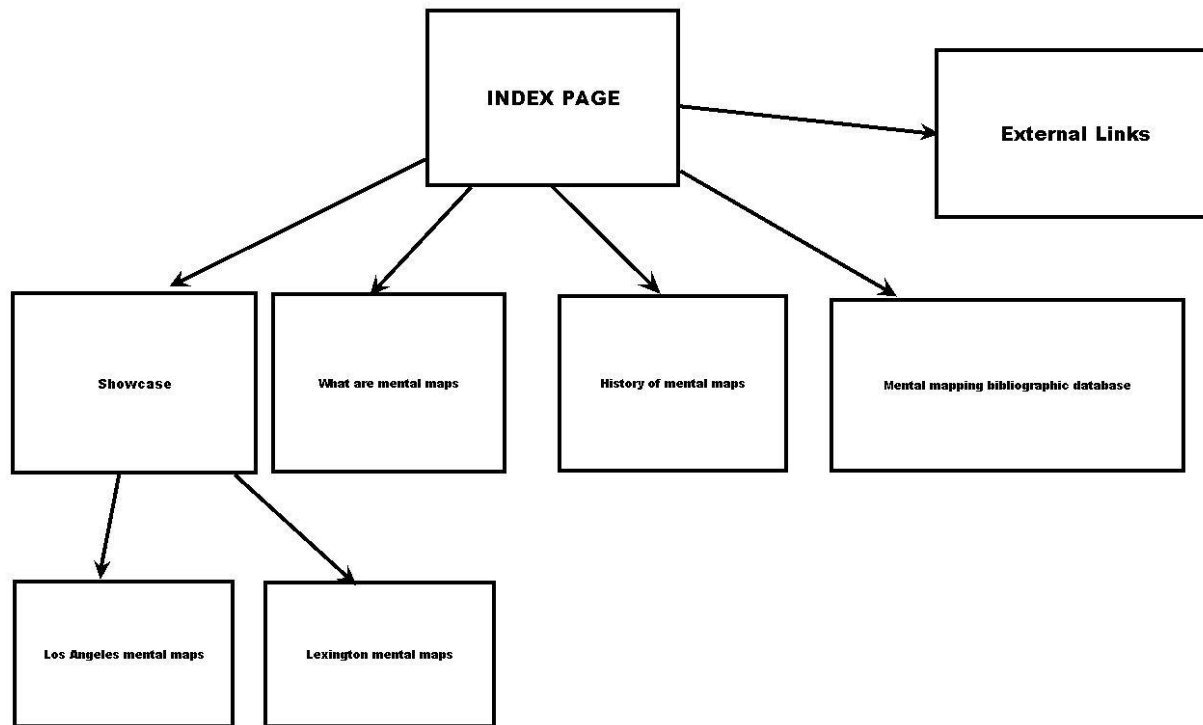
Strategic planning document

- Distills the information found in the Pre-design interview,
 - This is your contract with the client, in which you specify what is to be done
- Deals with two types of issues:
 - General
 - Specific
- Mission statement (general, broad goals):
 - What does this type of content want to accomplish in the grand scheme of things?
 - Who is it going to address?
- Objectives (specific, concrete aims)
 - What does the content want to accomplish concretely, in deliverable terms?
- Implementation
 - What are the deliverables?
- Actions
 - What is to be done to produce the deliverables?
- Monitor and feedback
 - How are we going to make sure that the product achieves its goals

Content Map

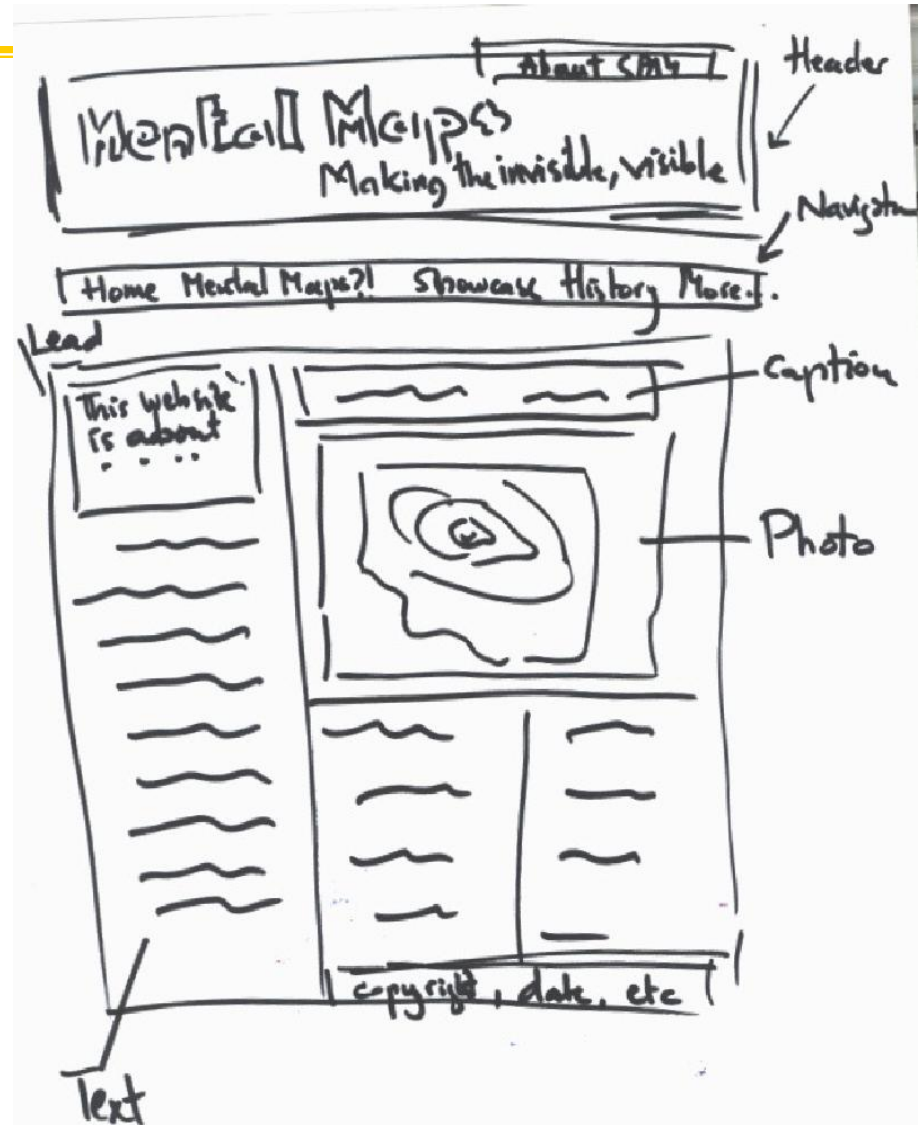
A simple diagram, depicting the pages (sections) and the relationships between them

Mental Maps content map



Storyboard

- Rough diagrams of each main page or master pages to be used on the content
- Organized in a stack
- Leaf through the pages as if you were navigating through the content



USABILITY PRINCIPLES

- **DON'T MAKE ME THINK**
 - When you look at an interface everything should be self-evident
 - People should be able to navigate a webpage or GUI (graphic user interface) without being conscious of their decisions
 - The process should be “natural”
 - “Thinking” is the process of figuring out the meaning of various page elements
 - It's a bad thing and you should stay away from it

Why “thinking” is bad

If people start “thinking:”

- They lose track of what they came to the page for OR
- They get bored OR
- Confused AND

WILL MOVE ON

- Remember: everything is to be understood in one glance
 - “On the web competition is just a click away”

How do people use multimedia content?

- When confronted by an interface, **people act on impulse**
- People are impatient: they **are not willing to spend more time** at an interface than they need to
- How much time are they willing to spend?
 - Very little!

Interfaces and the art of scanning

- People go to a webpage with a **very specific** goal (need) in mind and they expect to satisfy that need (goal) right away—instant gratification
- They get **easily frustrated** if the page does not serve them that ONE thing they are looking for
- This thing should be **available at a glance**, with minimum reading and reasoning

The navigation process

- SCAN
- SATISFICE
- MUDDLE THROUGH

Fact of life 1: We don't read computer screens. We scan them.

Reasons: It's a habit

- We never read everything, that's how we deal with most printed materials other than textbooks (or especially with those!)
- Reading stuff off screens is hard

We advance through visual hops anchored by “hot spots” (graphics)

- People go to a webpage looking for something that resembles (no matter how remotely) what you are looking for and IS CLICKABLE

Fact of life 2: People do not make optimal choices, they satisfice

- People do not reason about “the best choice”
- They choose the first reasonable option
 - Reasons: hurry, no penalty for being wrong, no benefit from being right, guessing is more fun

Fact of life 3: People don't figure out how things work. They muddle through

- People use a lot (and wrongheaded) guesswork
- They forge ahead and learn how to use a device or content through trial and error

COROLLARY:

- Everything should be made available to us in a snap and should be brainless

Layout principles

- **MAKE A STRONG, ONE GLANCE IMPRESSION**
 - Just like in a billboard, the viewer should understand with one look what is going on
- **FIRST THINGS FIRST**
 - Rule of newspaper headlines: the more important something is, the more prominent
 - Use bold and distinctive fonts but do not break the unity of the content
- **ORGANIZE THINGS HIERARCHICALLY**
 - Things related logically should be related visually
 - Things that are subordinated to other things should be nested visually in them
 - Good organization reduces the “thinking” process

Gaming/computing conventions

- On the web web, just like in other computing experiences, we use conventions
- These should be self-evident and in general use
- They include: layout, buttons, search engines, forms, etc
- They are part of user's repository of learned behaviors
- Chinese language test of convention use – your page should still be usable, even if translated into Chinese, just by knowing what the content is about
 - E.g. try to use the Chinese interface of yahoo to check your email

Page essentials continued-Text

Eliminate needless words

- Text should be treated as if it were optional: the user should be able to use the content even if a mysterious virus erases all the text
 - Text is a bonus feature on the main pages, it adds (a little bit) of depth to the content
 - Text is, however, important on informational contents
- Text should be easy to read and broken down into small paragraphs
 - All text should be broken down into columns, no column should be larger than 400 pixels
 - Use headers and subheaders generously but not frivolously
 - DO NOT insert hyperlinks in the text – except for blogging, where this has become a convention in and by itself
 - (it's like someone is shooting a pistol next to your ear when you are reading the newspaper)
 - Do not make headers into links UNLESS the header is followed by very little text
 - Create small links on the side
 - Blend text with pictures (break down monotony)
 - Long bodies of texts (articles, etc.) should be available in a print-ready format (preferably pdf)—make sure text width fits on printed page

First important principle of writing text for multimedia

- Write your copy BEFORE starting to design the page
 - Content should drive form
 - Write in short bursts, soundbite-like
 - Everything (or most everything) should be memorable

Second important principle of writing text for multimedia

- Stuff your page with keywords and phrases likely to appear in search engine searches
 - Search engines parse your content for keywords, which will be matched with your content when queries are sent to the search engine

Third important principle of writing text for multimedia

- Happy talk must die
 - Space on the screen is precious because a user's attention is short
 - Do not waste space with needless happy talk
 - Get to the point and stick with it
 - Don't carry an idea for more than a few sentences
- Instructions must die
 - If you feel like you need to explain your users what they should do with the navigation or graphic elements on the interface, this is a sign that your design sucks
 - Instructions should be limited to a few words (see page 48)
 - Technical instructions (downloading, etc) are, however, useful