Web Development



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Agenda

- Planning
- Modelling
- Execution

Web Design: Definition

 Wikipedia: "a process of conceptualization, planning, modeling, and execution of electronic media delivery via Internet in the form of Markup language suitable for interpretation by Web browser and display as Graphical user interface".

Processes:

1.Planning Stage - flowcharts (the outline) are created which illustrate the navigational structure of your website. Modeling Stage - static wireframes are created (the rough draft) which illustrate the skeletal layout for each section of your website. After the wire frames are created, graphics, colors and text are used to create the design of your web pages based on the layout of the wire frames. Execution Stage - your design is converted into a format supported by web browsers, text and content are added, and finally, your website is published live to the Internet (final draft).

Stage 1: Conceptualization and Planning

- A. Define your Target Audience
- B. Define the Purpose of the site
- C. Consider the types of content
- D. Define a Strategy / Style to best suit the purpose of the site
- E. Sitemap

A. Define your Target Audience

- Their need
- Their interests
- Their technological skills
- What hardware/software they use

B. Define the Purpose of the site

- Personal
- Profit-earning business
- Non-profit organisation
- Educational
- Entertainment
- Social

C. Consider the types of content:

- Text
- Graphics
- Video
- Sound
- Forms
- Animation

D. Define a Style to best suit the purpose of the site:

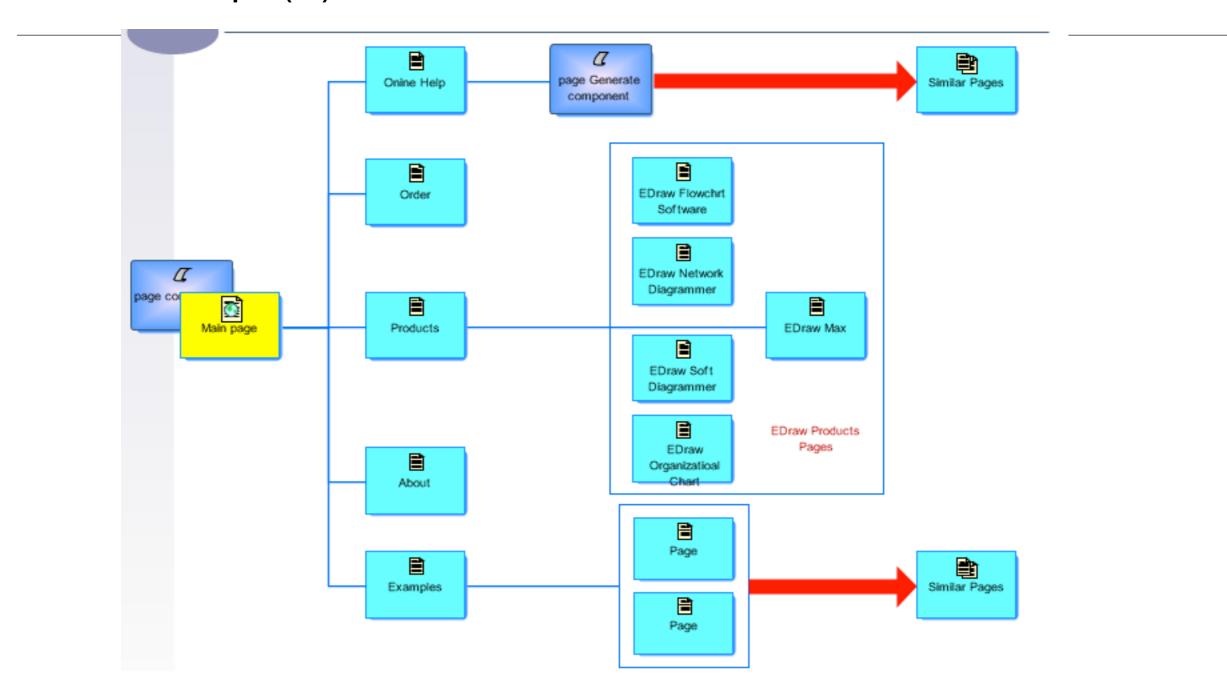
- Professional
- Scholarly
- Casual
- Child friendly
- Teen oriented
- Artistic

E.Sitemap (1)

- Tools:
 - Pen and Paper or
 - Diagramming Software

- •At the top of the sitemap list the name of the website. Then list each primary section of the website:
- •These sections are the main navigation for your website. Try to limit the number of these section so that your visitors are not overwhelmed. Add all of the secondary pages (subsections) that will be listed on each of the primary pages.
- •The secondary navigation needs to be more descriptive than the primary navigation.
- •The deeper your websites' navigational hierarchy goes, the more descriptive each label should be.

E.Sitemap (2)



E.Sitemap (3)

· Do:

- Less is more; keep the number of primary sections to a minimum.
- Whether you use a pen and paper or flowchart software, keep things as clean and organized as possible. Although you (and anyone working with you) are the only ones that will be using the flowchart, it still needs to make sense.
- Your primary sections should use broader terms, while secondary and tertiary terms should be more descriptive.

E.Sitemap (4)

Dont

- Don't use very descriptive terms in your primary navigation unless your entire website focuses on one narrow topic.
- Don't try and lump multiple topics on the same page. Create a general section for these topics and from that section create subsections. This will make the subsection (descriptive) web pages more likely to have better rankings in the search engines.

Web Design Stages

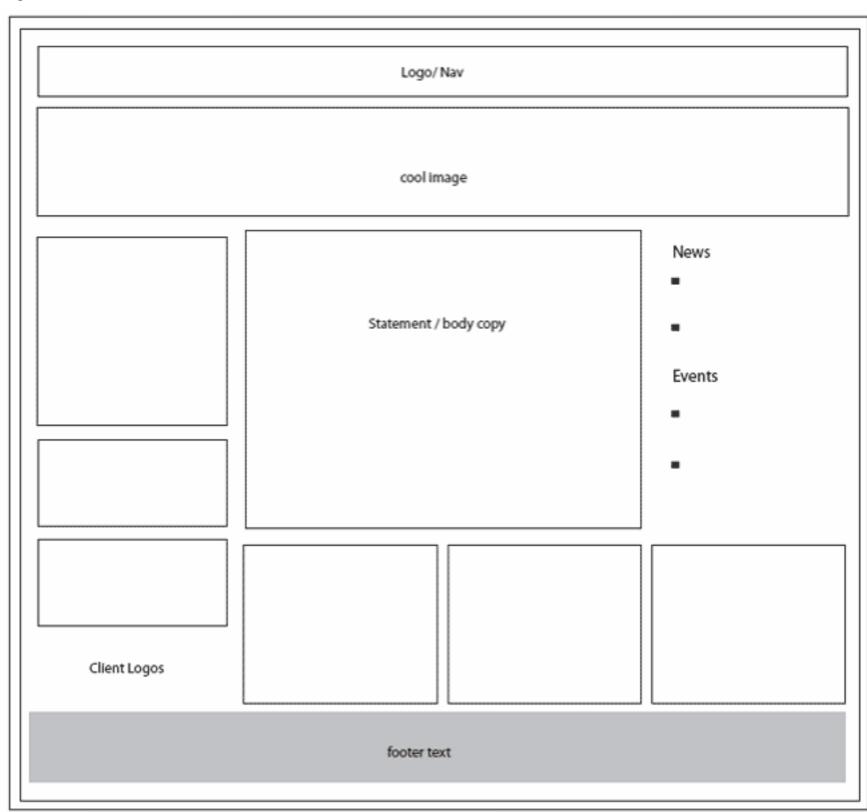
- Planning
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2. Modeling

- In the modeling stage, static "wireframe" mockups are created.
 - Simple drawings that show the placement of elements on a web page.
 - Allow web designers and clients to focus on the layout of the site without the distraction of colour, type and other design elements.
- Each mockup illustrates a bare-bones skeleton of the layout for each of the web pages that will be included in your website.
- This stage is important because it gives us an idea of where different elements will be placed in our design.

Wireframe Example

- No colors or graphics included
- If some of your pages will be using the same layout, then it is not necessary to mock all of those pages up - just be sure to mockup any unique layout that your website will have



Modeling: Do's

- Mockup all unique pages
- Include important elements (logo, navigation, content placement, images/ video placement)
- Start from the top and work your way down
- Reference your flowchart created in stage 1 to make you don't forget to mockup any pages
- Focus on clean, user friendly layouts
- Label your elements so you don't forget what they are when you reference them in stage 3, execution
- Use other web sites as inspiration
- For images search for "Creative Commons" licensed images

Modeling: **Don't's**

- Don't include graphics or colors (that's for the next stage)
- Don't make your mockups too "busy"; focus on clean, well organized, user friendly layouts
- Don't skip this stage; it is just as important as the first and the last
- If you take elements from other websites, make sure you don't plagiarize;
 there is a difference between being inspired by another website to create
 certain elements of your design and merely replicating their layout and colors

Web Design Stages

- Planning
- Modeling
- Execution

Execution

- The planning from stages 1 and 2 are combined to assist in creating a live, interactive website.
- By the time you reach the third stage, you should have a clear idea of:
 - how your visitors will get from one place to another (stage 1, flowchart)
 - how your web pages will be laid out (stage 2, wireframe mockups)
- If you don't have a clear idea of these two things, go back to the first and second stages and continue to develop them. You will find that the third stage is easiest when you have constructed a clear, concise battle plan for designing your website

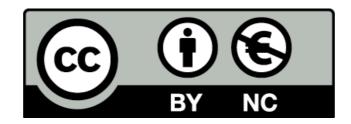
Execution Do's & Don't's

· Do

- Experiment and Innovate
- Use you text book & sitepoint web site as a reference manual for html & CSS
- Make intelligent use of Eclipse
- Publish the site regularly to verify its operation
- Use w3c site for regular html and css validation
- Spend 2 hours of supervised labs on project + 1-2 other hours per week.

Dont

- PANIC!
- The project should be fun and interesting and a way of deepening your knowledge of HTML, CSS and Eclipse.



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