

WEB DOCUMENT STRUCTURE

SEMANTICALLY CORRECT HTML



MORE HTML BASICS

A FEW MORE THINGS...

ATTRIBUTES IN ELEMENTS

Element: any markup e.g `<p> ...
</p>`

Attributes

- Adds more meaning and extra data
- E.g. ``
- E.g. `<p class="loud">...</p>`

Sometimes mandatory, sometime optional

Example: `<html lang="en">...`

SPECIAL RESOURCE NAMES – THE WEB

Special filename: index (*as in index.html*)

Examples:

- <http://www.rochester.edu/college/honesty/index.html>
same as...
- <http://www.rochester.edu/college/honesty>
- <http://www.facebook.com/index.php>
same as...
- <http://www.facebook.com>

Web servers configured to automatically recognize; If present, automatically loads

CSC 170: start.html (for lab assignments only)

LINKS TO OTHER RESOURCES

Examples:

```
<img src="" ...  
<a href="" ...
```

Link = path to a resource

path: absolute or relative

Absolute path:

```
<a href="http://www.rochester.edu/college/honesty/index.html">Academic  
Honesty</a>
```

Relative path:

```
<a href="undergraduates.html">Undergraduates</a>
```

RELATIVE PATHS (LINKS)

- Same directory

`Undergraduates`

- Child

`Undergraduates`

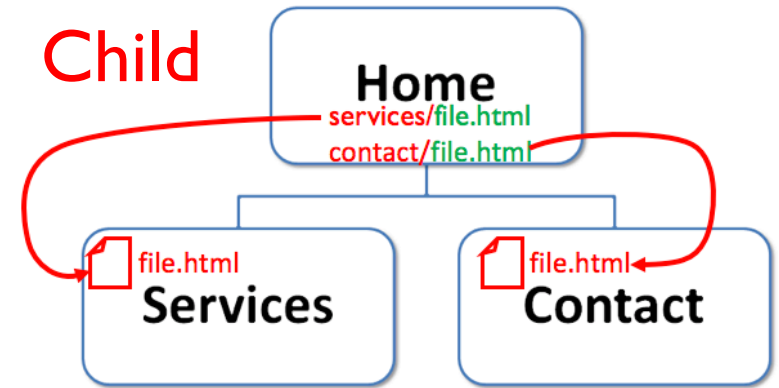
- Parent

`Home page`

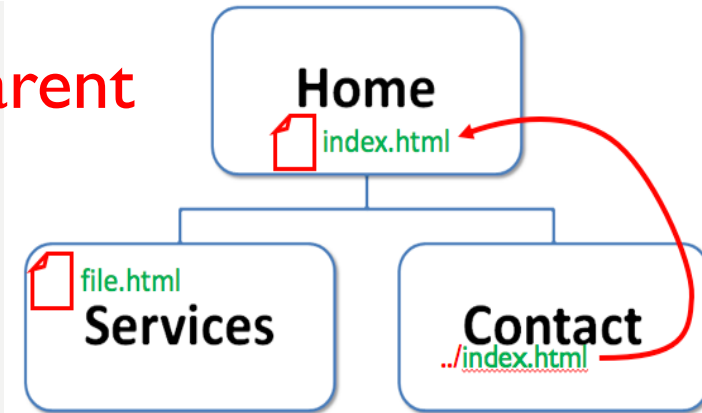
- Sibling

`Home page`

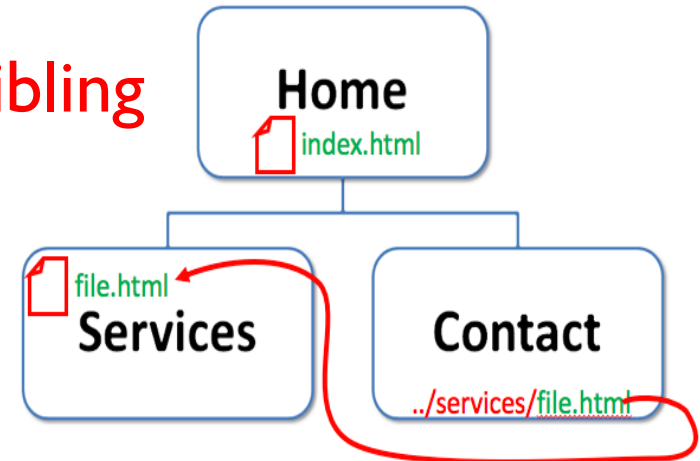
Child



Parent



Sibling



EXTERNAL LINKS

For absolute path links, i.e. links to resources on other servers...

- Using attribute: `target="_blank"` ...is for off-server links
- Example:

```
<a href="http://www.google.com" target="_blank">Google</a>
```

- Never use for links within the same website

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PROGRESSIVE ENHANCEMENT

LAYERS



Strategy for
structured
(web)
development

The diagram consists of four rounded rectangular boxes arranged in a 2x2 grid. The top-left box is dark grey, the top-right is teal, the bottom-left is green, and the bottom-right is red. Each box contains a principle of progressive enhancement. The entire grid is set against a light grey background with a subtle geometric pattern of overlapping triangles. To the right of the grid is a large, bold title.

For building
webpages in a
layered fashion

Each layer
does not need
more layers to
be whole

Each layer
enhances
(provides
more value) to
the next layer

PROGRESSIVE ENHANCEMENT

PROGRESSIVE ENHANCEMENT FOR WEB DEVELOPMENT

0. Content - foundational layer

- MS Word (?) ...anything

1. Structure

- HTML - hypertext markup language
- Proper tags enable the "worldwide database" ...big data

2. Presentation

- CSS - cascading style sheets (next week)
- formatting and layout
- E.g. red = danger

3. Behavior

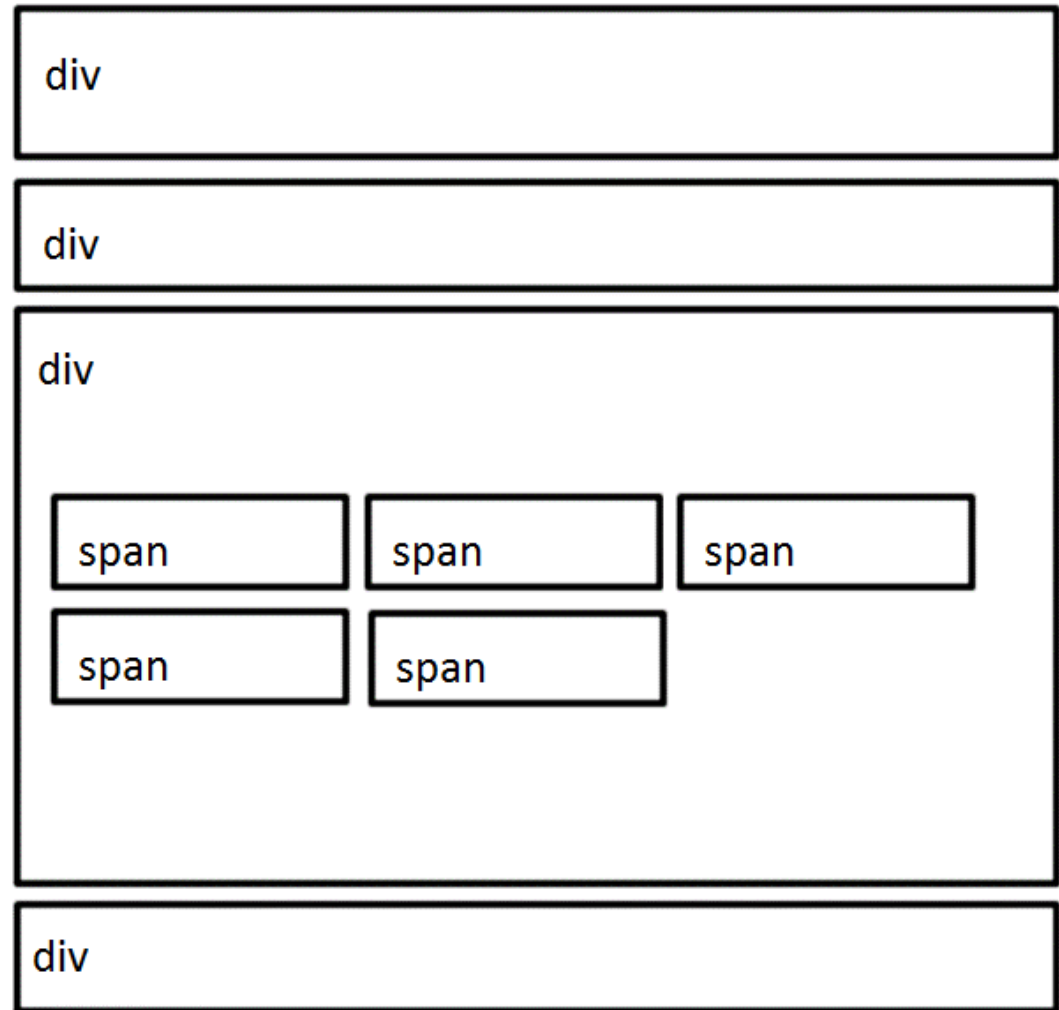
- JavaScript (and others)
- User interactions (clicking, tapping - things move around on the screen)

THE SEMANTIC WEB

- RULE: use HTML tags that describe the meaning of the content only (not the appearance)
- Separate: form from content
- See: *The Machine is Usling Us* (YouTube)
- One benefit (among many): find-ability...
 - Google scans webpages and indexes content
 - Google getting correct meaning out of words is hard
 - Tagged content (using the correct HTML tags) makes Google work better
 - YOU (the developer) pick the right HTML tags so your webpages will be found better in Google
...among other good things

STRUCTURAL ELEMENTS

- Block and Inline
- BLOCK tags: examples: H1, H2, etc., P
 - stack-up top over bottom
 - 100% width
 - as tall as the content needs to be
- INLINE tags: STRONG, EM, A (hypertext), IMG
 - line-up side-by-side
 - as wide as they need to be
 - as tall as one line
- Non semantic value tags:
DIV and SPAN (old fashioned)



HTML 5

The World Wide Web Consortium (<http://w3c.org>) sets the standards for HTML and its related languages.



New elements introduced

Note: lots dreamed-up by W3C - not all get much action



Popular (we'll be using)

<header>...

< nav >...

< main >...

< article>...

< aside >...

< footer >...

LAB ASSIGNMENTS

- Starting in Lab 4: put your content into "structural" tags
- For the purposes of CSC 170 lab assignments:
 - Use these structural elements...
 - `<header>...</header>`
 - `<article>...</article>`
 - `<aside>...</aside>`
 - `<footer>...</footer>`
 - ...just those, in that order
 - ...nothing in between
 - Try to balance content between the ARTICLE and the ASIDE

