WEB DOCUMENT STRUCTURE

SEMANTICALLY CORRECT HTML

MORE HTML BASICS

A FEW MORE THINGS...

ATTRIBUTES IN ELEMENTS

Element: any markup e.g …

Attributes

- Adds more meaning and extra data
- E.g. <img src="" alt="">
- E.g. …

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

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

- Child

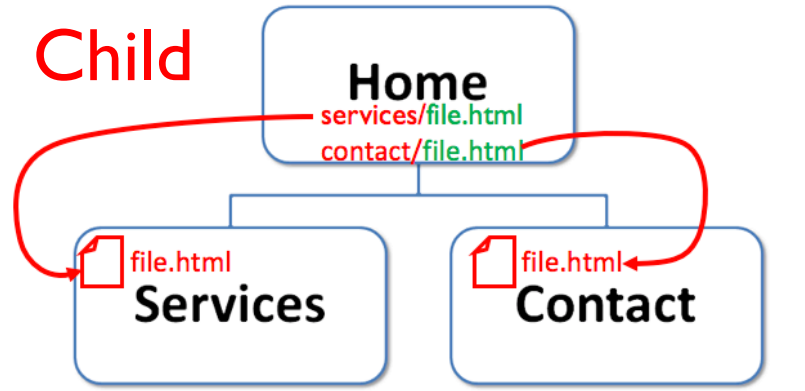
```
<a href="services/index.html">Undergraduates</a>
```

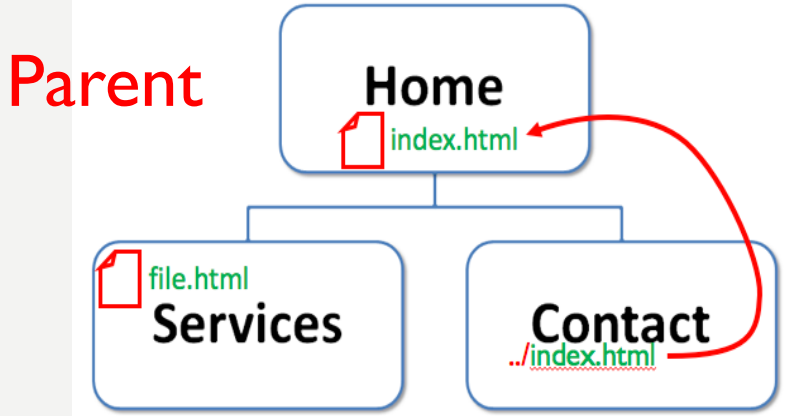
- Parent

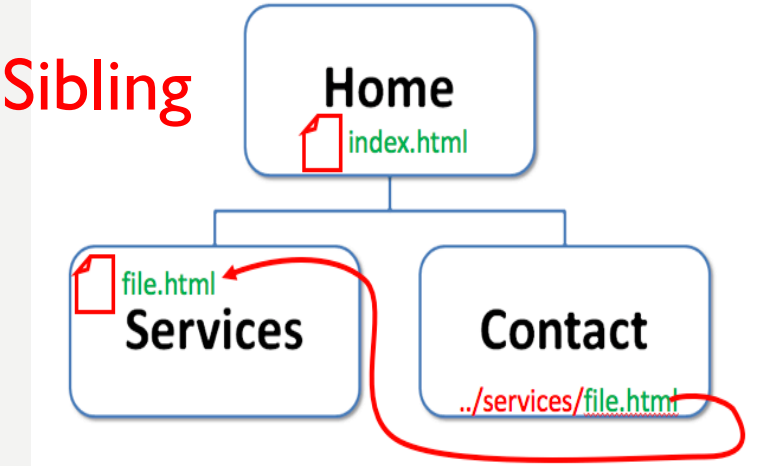
```
<a href="../index.html">Home page</a>
```

- Sibling

```
<a href="../services/file.html">Home page</a>
```







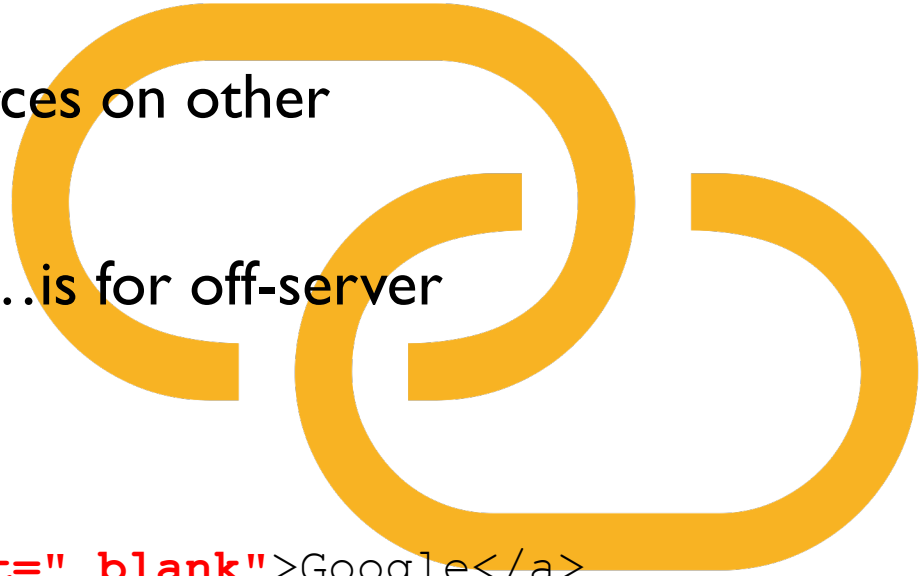
EXTERNAL LINKS

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



WEB DOCUMENT STRUCTURE

SEMANTICALLY CORRECT HTML

PROGRESSIVE ENHANCEMENT

LAYERS

PROGRESSIVE ENHANCEMENT

Strategy for structured (web) development

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 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

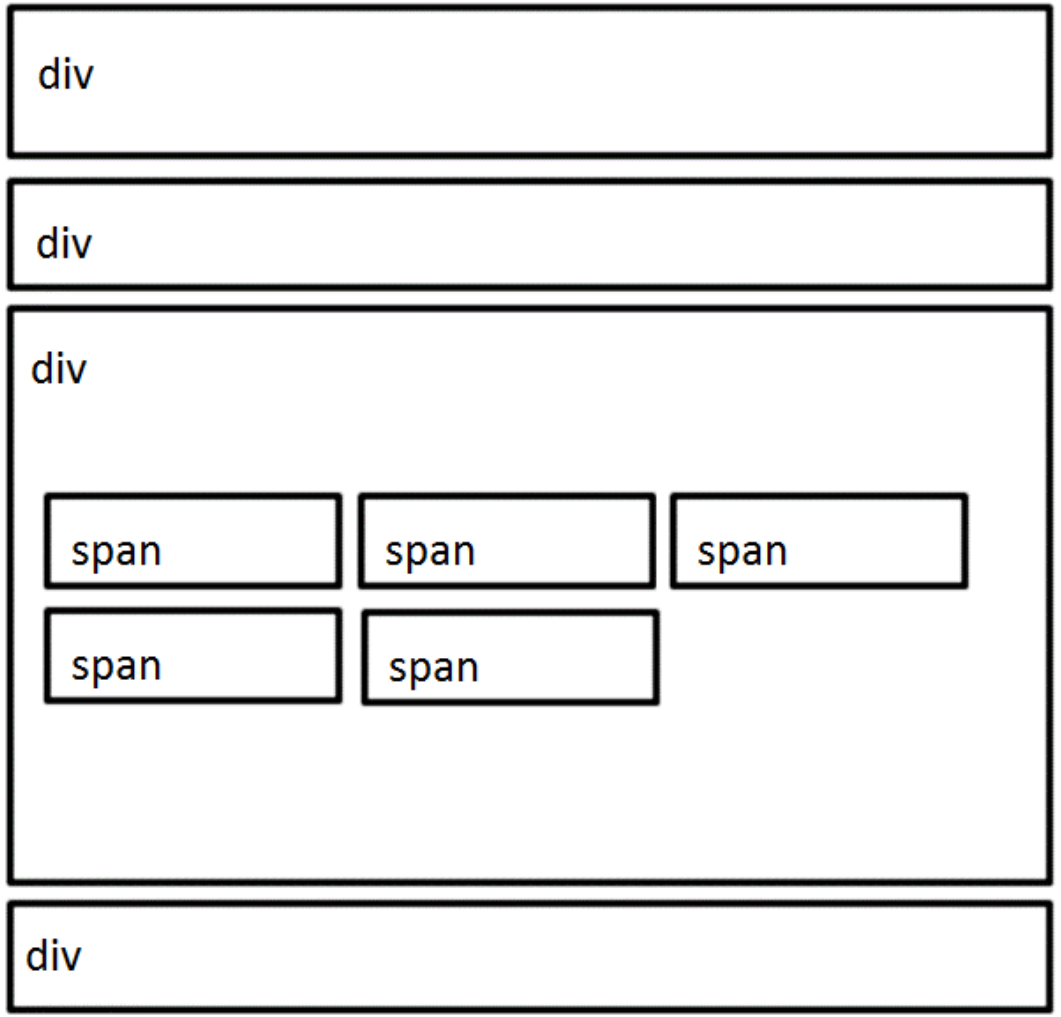
- JavaScript (and others)
- User interactions (clicking, tapping - things move around on the screen)

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 Us/ing 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