HTML

CS 390 – Web Application Development

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Outline

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WIWYT – HTML

- HTML is the most basic building block of the web.[1]

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- It establishes the structure of a given webpage, on top of which we add appearence and functionality.

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- CSS defines a set of rules applied based on HTML tags and attributes, that style and animate the webpage.

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Each URL has the following general syntax:

Structure:

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Example:

`https://www.example.com:443/some/dir/?param=hi&lang=en#about`

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4. `<!-- This is an HTML comment -->`.

The Anatomy of an HTML Element

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- **Self-Contained Tag**: No content or closing tag.
- Multiple attributes use space separators.

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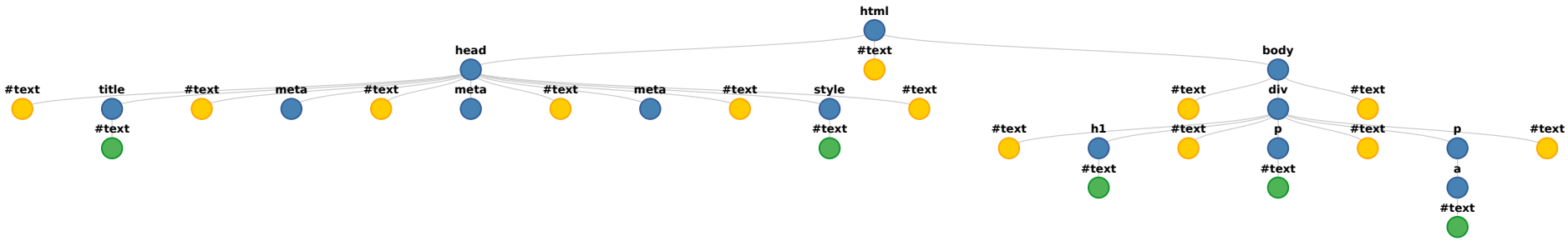
Additionally, we use it extensively when performing browser automation and using tools like Selenium. We'll talk more about DOM Traversal and Manipulation during the JavaScript module.

DOM (Contd.)

DOMs are often represented as **trees**. Below is the tree for `https://example.com/`:



HTML4 vs HTML5

What's new?

- **Semantic HTML:** HTML5 introduces new semantic tags: `<header>`, `<footer>`, `<aside>`, `<figure>`, `<figcaption>` for bots and screenreaders.

Further reading: `https://www.w3.org/TR/html5-diff/`

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- **In-built SVG:** Previously required browser plugins like Flash, but is now baked into HTML5.

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- **Better Storage:** Uses local storage instead of cookies. Adds Application Cache, Web SQL DB and Web Storage.
- **In-built SVG:** Previously required browser plugins like Flash, but is now baked into HTML5.
- **Multimedia Support:** Integrates the open-source WebM format for plugin-free playback.

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HTML Tag Rundown

Tag	Use-case
`<head>`	Webpage Metadata Container

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`<strong>`	Emphasises a phrase

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`<ul>`	Unordered List
`<ol>`	Ordered List
`<li>`	Single list element

HTML Attributes

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HTML for Structural Heirarchy Management

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- Additional **now-unsupported** styling elements: `<basefont>`, `<big>`, `<center>`, `<font>`, `<tt>`.

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Protip: To make a hyperlink spawn a new tab, use `target='_blank'`.

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Document validators are a great first diagnostic step for a broken page.

Let's Build a Webpage!

If you can view this screen, I am making a mistake.

Outline

Piazza

Our Piazza forum is up!
Please join: `https://piazza.com/purdue/fall2023/cs390`

Thank you!

Have an awesome rest of your day!

Slides: `https://cs.purdue.edu/homes/jsetpal/slides/html.pdf`

If anything's incorrect or unclear, please ping `jsetpal@purdue.edu`
I'll patch it ASAP.