

CSC309 *Programming on the Web*

week 2: project management, html

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Office Hours: M 3:45-5:45 BA4222

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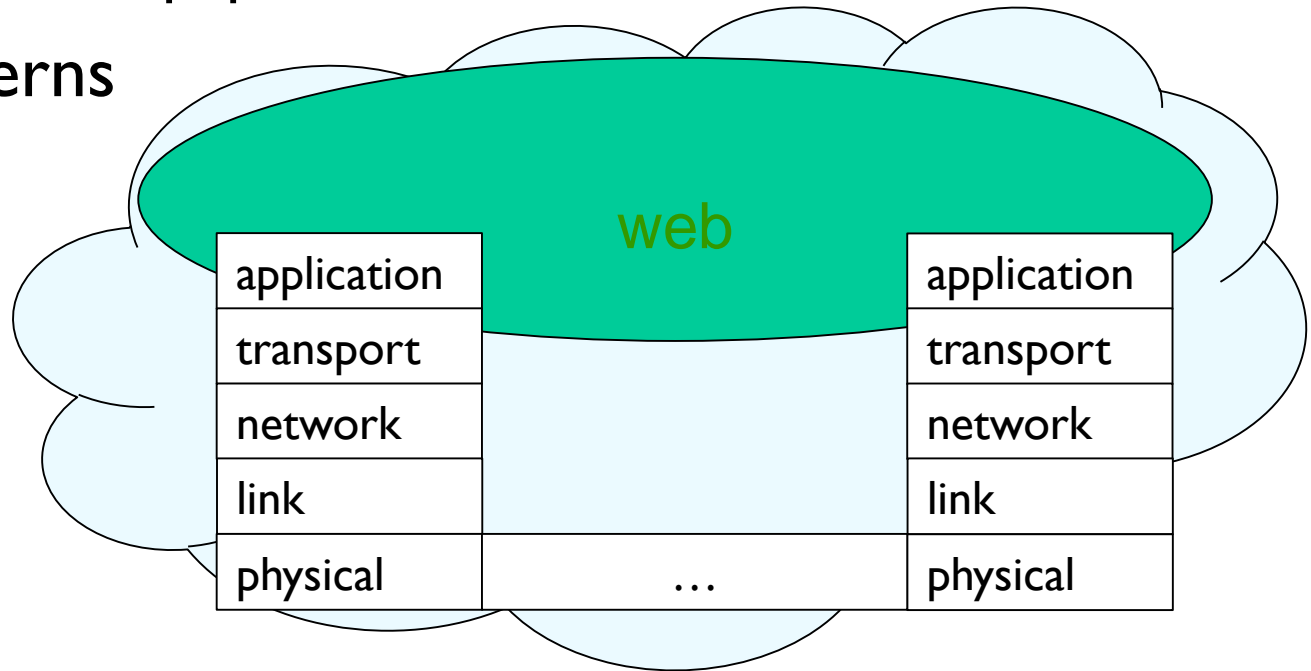
<http://www.cs.toronto.edu/~ahchinaei/>

survey 1

- ❖ in survey 1, you provide us with:
 - your UTorID,
 - your GitHub username, and
 - your familiarity with technologies related to this course
- ❖ before completing the survey
 - make sure you have a GitHub username,
 - if you don't, sign up here: <https://github.com/join>
 - and, get a student developer pack here: <https://education.github.com/pack>
- ❖ if you have the GitHub username and UTorID
 - complete the survey here: <https://goo.gl/forms/1sovPcFA1dLEo1k42>
(deadline: Jan 09)

review

- ❖ development life cycles (processes)
 - wf ... prototyping ...extreme prog... mvp
- ❖ architectures
 - client-server vs. p2p networks
- ❖ design patterns
 - mvc
- ❖ ip stack
- ❖ **Today**
 - html



web

- ❖ it's an information space system—based on request & response—with the following features:
 - **HTML**: to describe (hypertext) documents/pages
 - **URL** : to uniquely locate a resource
 - **HTTP**: to describe how requests & responses operate.
 - **web server**: to respond to HTTP requests
 - **web browser**: to make HTTP requests from URLs and render/display the HTML document received

hypertext markup language

- markup term?

- general syntax:

`<element>content</element>`

- example:

`<h2>CS is COOOOOL</h2>`

hypertext markup language

- ❖ it's used to describe the **content and structure** of information in a document (web page)
 - **markup** (aka **tag, element**)
 - information about content and structure
- ❖ **world wide web consortium (w3c)**
 - an international community to develop web standards
 - including html
- ❖ **history**
 - **html** (1990), **xhtml** (2000), **html5** (2009)

html5: structure

❖ **element content**

- ...

❖ **attribute**

- ...

html5: structure

❖ **design tip**

- separate semantics from appearance
- in developing html documents:
 - focus on structural semantics
 - not on appearance

❖ **advantages**

- ...

html5: example

❖ !doctype; html; head; body

```
<!doctype html>
<html>
  <head lang="en">
    <meta charset="utf-8">
    <title>my first HTML doc</title>
    <link rel="stylesheet" href="style/main.css" type="text/css">
    <script src="js/first.js"></script>
  </head>
  <body>
    ...
  </body>
</html>
```

html5: element examples

<!doctype> ...

<html> ...

<header> ...

<body> ...

html5: elements for header

❖ descriptive element examples:

- `<meta>` ...
- `<title>` ...
- `<link>` ...
- `<nav>` ...
- `<script>` ...

html5: elements for body

❖ Examples:

- `<h1>...<h6>` ...
- `<p>` ...
- `<div>` ...
- `<section>` ...
- `<article>` ...

html5: elements for body

❖ Examples:

- `<aside>` ...
- ``, ``, `` ...
- `<a>` ...



html5: elements for body

❖ Examples:

- `` display a content image
- `<figure>` display a content (such as an image) that is *important* to the content but its position is *unimportant*
- `<figcaption>` nested in `<figure>`

html5: style guide

❖ some style guide tips

- declare the document type
- use lower case for elements, attributes, etc.
- close empty elements too
- use quote for attribute values
- do not use space in attribute values or around =
- provide **alt** attribute for **img** element
- separate long/logical blocks with blank line
- indent properly

html5: style guide

❖ some style guide tips

- do not omit **html**, **body**, or **header**
- set a meaningful **title**
- set a **viewpoint**

`<meta name="viewport" content="width=device-width, initial-scale=1.0">`

- provide comments when needed
- use style sheets properly
- use javascript properly
- use **html validator**