

# Internet Technology

(Unit Code: CDA400)

# Internet Technology

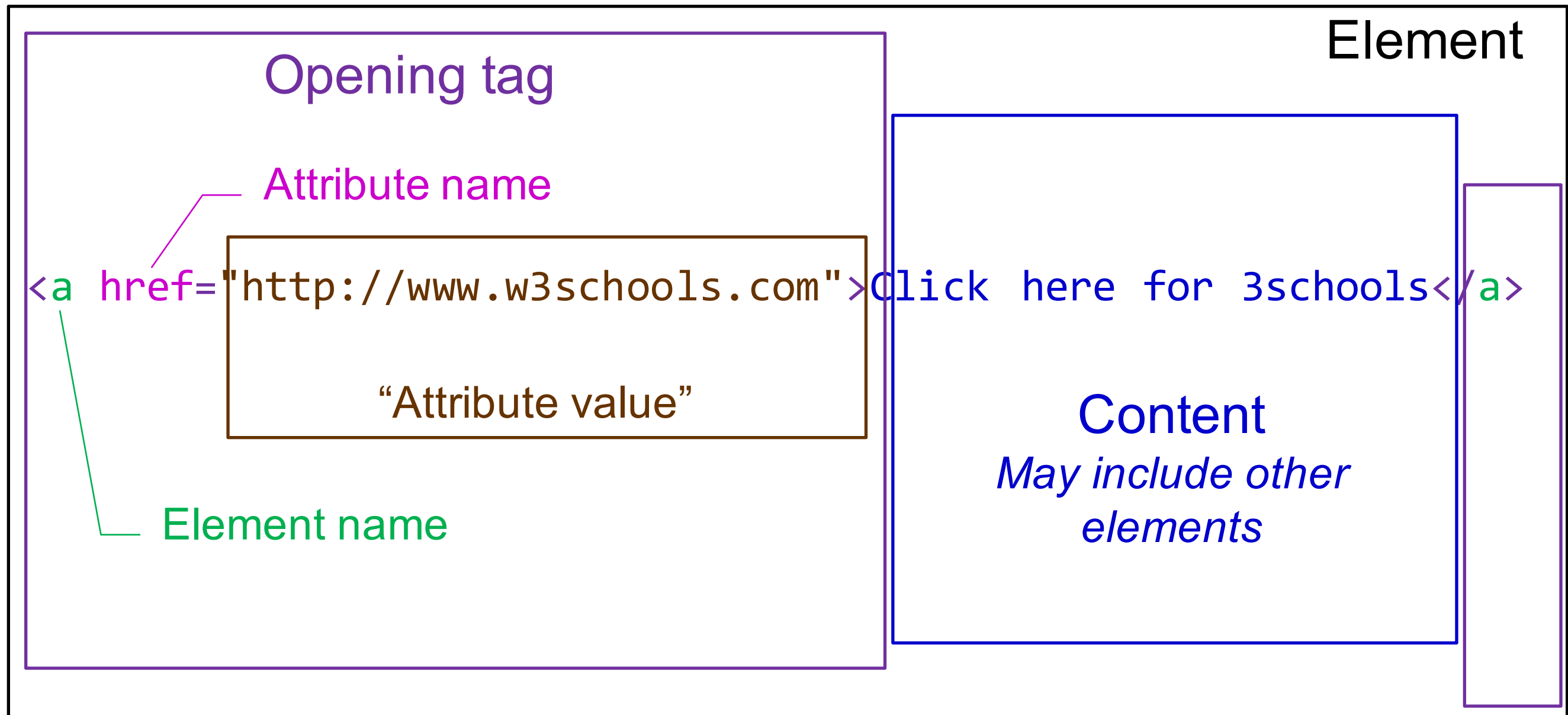
## (week 2)

- Recap of week 1
- HTML5 Template
- Some New Tags
- Web Standards
- Complete HTML table task
- Start assessment 1

# About the Unit

- TwoParts
  - HTML
  - CSS
- One Assessment, a TCA in mid January 2017

# Element syntax



# Element syntax

- Basic building block of an HTML document
  - container for content
  - each type of element may contain certain other elements
  - each type of element may have certain attributes
  - some elements don't need closing tag (“void” elements) e.g. `<img>`

# HTML Headings

- Six levels of headings, elements **h1** to **h6**  
**<h1>**This is biggest heading**</h1>**  
**<h2>**This is smaller heading**</h2>**
- Use the heading order sensibly and do not skip heading levels (e.g. from h2 to h6)
- **<h1>** should only be used once

# HTML Images: **img** element

- Image type: PNG, JPEG and GIF
- **<img>** tag is *empty*, i.e. it contains attributes only, and has no closing tag  
****
- **src** attribute: exact filename of picture, with path if necessary
- **alt** attribute: specifies an alternate text for an image, if the image cannot be displayed and is also used by search engines

# Links: anchor element `<a>`

- Syntax: `<a href="url">Link text</a>`
- Example:  
`<a href="http://www.w3schools.com/" target="_blank">`  
Visit W3Schools  
`</a>`
- Link text should clearly identify the target of each link
- Use text that makes sense when read out of context, e.g. avoid “click here”

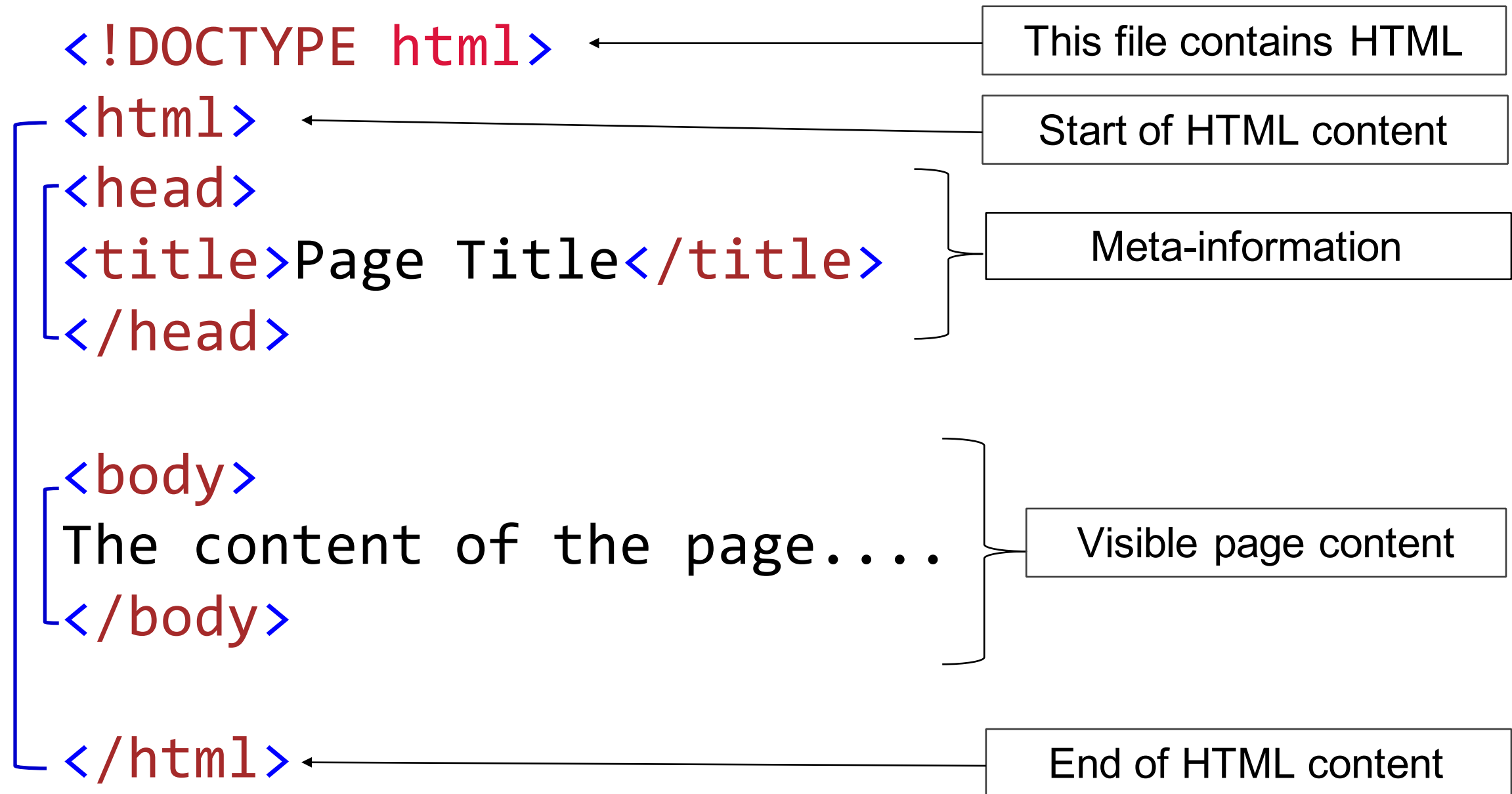


# HTML Comment

<!-- This is a comment -->

- Add comments for the purpose of making the source code easier to understand
- Comments are not displayed in the browsers
- It is also a good practice to "hide" scripts from browsers without support for it
- *This will be checked in your assessment !*

# Top-level structure



# Some Common Mistakes

```
1 <hmtl>
2     <head>
3         <h1> My first web page</h1>
4     </head>
5     <body>
6         <p1> This is a paragraph .... </p1>
7         <img scr="image.jpg" alt="description">
8         <a href="http://www.w3schools.com"></a>
9     </body>
10 </html>
```

# Week 1: Create Your Own Simple Web Page

- Basic HTML Structure
  - Creating a title
  - Including section headers
  - Starting a paragraph
  - Inserting images on a page
  - Creating a link to another web page
  - Adding line breaks/horizontal rules
  - Adding comments

# Internet Technology

(week 2)

- `<br>` creates a line break
- Introducing the unordered list element
- Used for lists (obviously) and for navigation links

## HTML

## Browser Output

```
<ul>
  <li>List item one</li>
  <li>List item two</li>
  <li>List item three</li>
</ul>
```

- List item one
- List item two
- List item three

# Internet Technology

(week 2)

- Recap of week 1
- Web Standards
- Make another web page using Table Elements

# Web Standards

- We need to write valid W3C HTML
- World Wide Web Consortium = W3C
- W3C is a committee that lays down web standards
- Some browsers may tolerate errors, however we need consistency across all of them.
- Browsers will interpret HTML/CSS using the W3C specification.

# How do we validate HTML?

W3C offers a online validation service

<https://validator.w3.org/>

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➤ Your HTML must be valid from now on



# Table Elements

- The `<table>` tag encompasses the whole table
- It contains rows, each one is a `<tr>` element
- Each row may contain a mixture of heading and data cells which are defined by the `<th>` and `<td>` tags
- Optionally you may also add a `<caption>` to your table

# A basic 3 x 3 table

```
<table>
  <caption>Table Title</caption>
  <tr>
    <th>Header 1</th>
    <th>Header 2</th>
    <th>Header 3</th>
  </tr>
  <tr>
    <td>Row 1 Col 1</td>
    <td>Row 1 Col 2</td>
    <td>Row 1 Col 3</td>
  </tr>
  <tr>
    <td>Row 2 Col 1</td>
    <td>Row 2 Col 2</td>
    <td>Row 2 Col 3</td>
  </tr>
</table>
```

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# Table Attributes

- The `<table>`, `<td>` and `<th>` tag elements can also contain attributes to modify the look and feel of the table.
  - `<table border="1">` this can be used until we introduce CSS
  - `<th colspan="2">`, `<td colspan="2">` defines the number of columns a cell should span

# Attributes Example

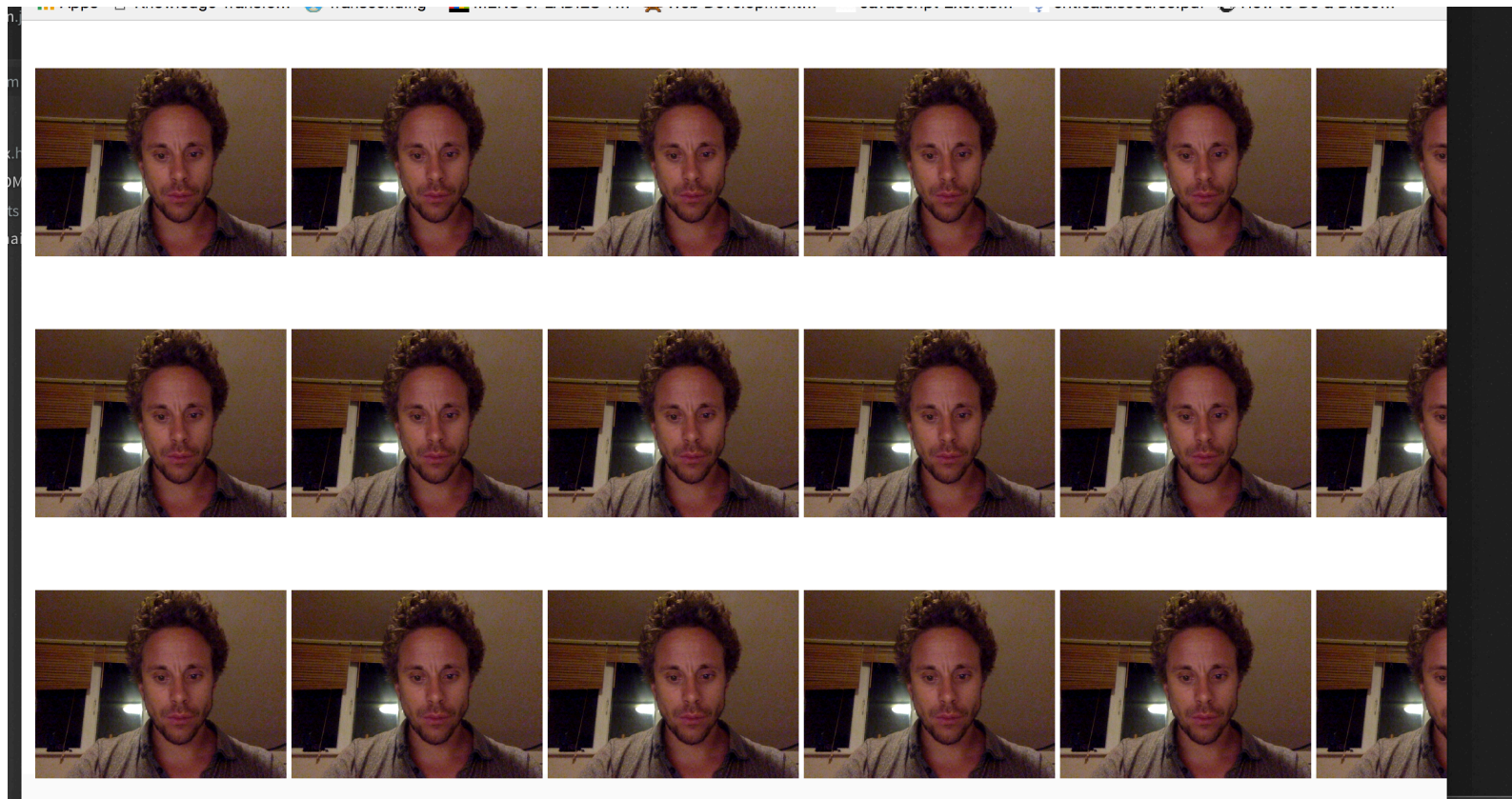
```
<table border="1">
  <caption>Table Title</caption>
  <tr>
    <th colspan="2">heading 1</th>
    <th>heading 2</th>
  <tr>
    <td colspan="3">row 1 col 1</td>
  <tr>
    <td colspan="2">row 2 col 2</td>
    <td>row 2 col 2</td>
  </tr>
  <tr>
    <td>row 3 col1</td>
    <td>row 3 col2</td>
    <td>row 3 col3</td>
  </tr>
</table>
```

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# This weeks tasks

Download the full task worksheet from SOL

- Create your timetable in HTML
- Advanced task! The webcam mosaic



# Next Time ...

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# References

- HTML5 Introduction [http://www.w3schools.com/html/html5\\_intro.asp](http://www.w3schools.com/html/html5_intro.asp)
- HTML tables [http://www.w3schools.com/html/html\\_tables.asp](http://www.w3schools.com/html/html_tables.asp)