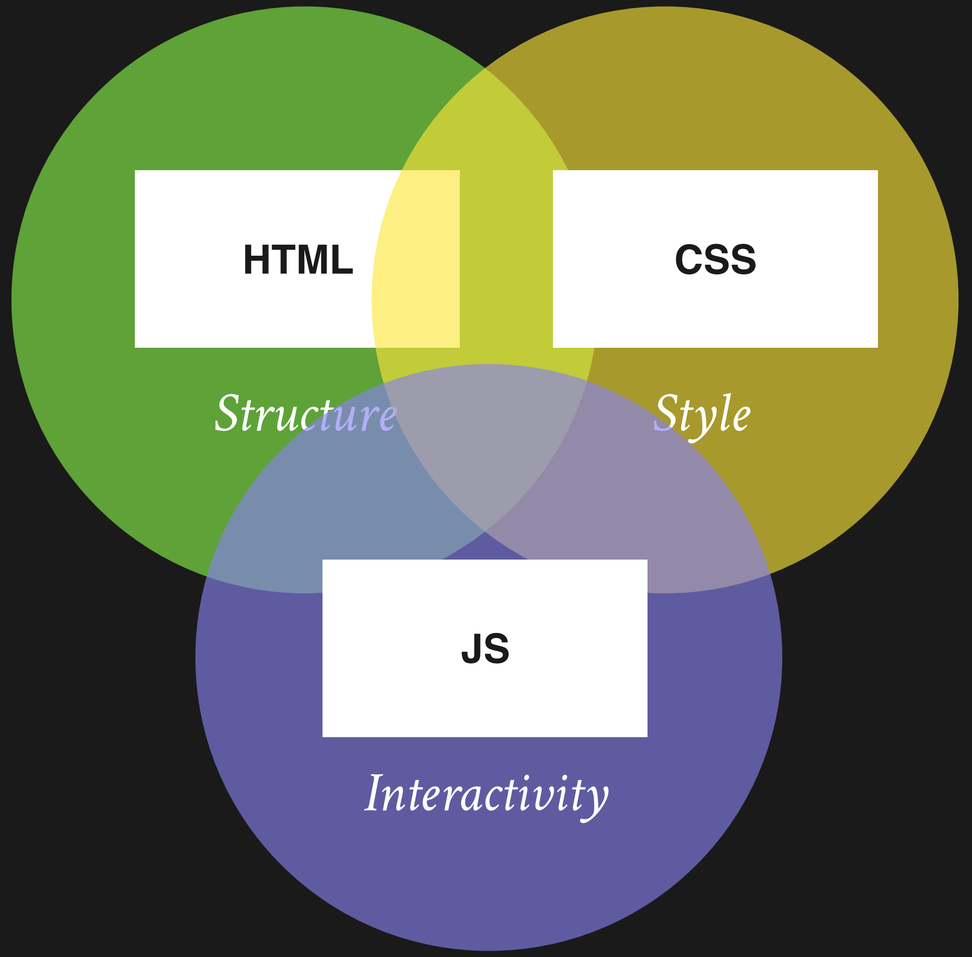
WEB TECHNOLOGIES PROGRAM

HTML deep dive

A closer look at HTML syntax

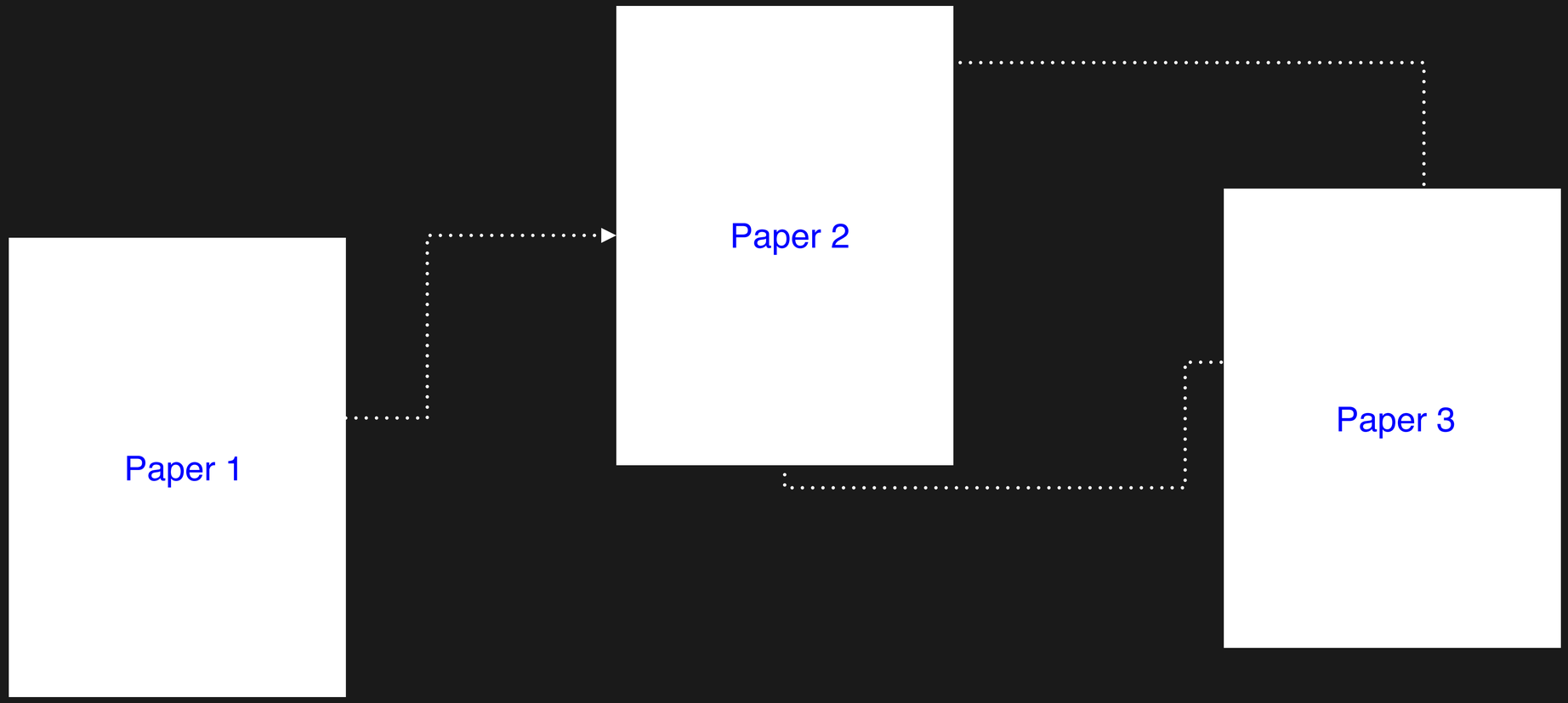

HTML
CSS
Structure
Style
JS
Interactivity

MR BEAN

Comedy star named after popular legume

TIM BERNERS-LEE

Inventor, World Wide Web


Paper 1
Paper 2
Paper 3

A brief history

HTML Tags

This is a list of tags used in the HTML language. Each tag starts with a tag opener (a less than sign) and ends with a tag closer (a greater than sign). Many tags have corresponding closing tags which identical except for a slash after the tag opener. (For example, the TITLE tag).

Some tags take parameters, called attributes. The attributes are given after the tag, separated by spaces. Certain attributes have an effect simply by their presence, others are followed by an equals sign and a value. (See the Anchor tag, for example). The names of tags and attributes are not case sensitive: they may be in lower, upper, or mixed case with exactly the same meaning. (In this document they are generally represented in upper case.)

Currently HTML documents are transmitted without the normal SGML framing tags, but if these are included parsers will ignore them.

Title

The title of a document is given between title tags:

```
<TITLE> ... </TITLE>
```

The text between the opening and the closing tags is a title for the hypertext node. There should only be one title in any node. It should identify the content of the node in a fairly wide context, and should ideally fit on one line.

The title is not strictly part of the text of the document, but is an attribute of the node. It may not contain anchors, paragraph marks, or highlighting. the title may be used to identify the node in a history list, to label the window displaying the node, etc. It is not normally displayed in the text of a document itself. Contrast titles with headings .

Next ID

Obsolete: NeXT Browser only. May be ignored. This tag takes a single attribute which is the number of the next document-wide numeric identifier to be allocated (not good SGML). Note that when modifying a document, old anchor ids should not be reused, as there may be references stored elsewhere which point to them. This is read and generated by hypertext editors. Human writers of HTML usually use mnemonic alpha identifiers. Browser software may ignore this tag. Example of use:

```
<NEXTID 27>
```

Base Address

Anchors specify addresses of other documents, in a from relative to the address of the current document. Normally, the address of a document is known to the browser because it was used to access the document. However, is a document is mailed, or is somehow visible with more than one address (for example, via its filename and also via its library name server catalogue number), then the browser needs to know the base address in order to correctly deduce external document addresses.

The format of this tag is not yet specified. NOT CURRENTLY USED

First webpage created with html

https://www.w3.org/History/19921103-hypertext/hypertext/WWW/MarkUp/Tags.html

Practical benefits as a non-engineer

1. Simple copy changes
2. Third party tools
3. Edit in the browser

H Hyper

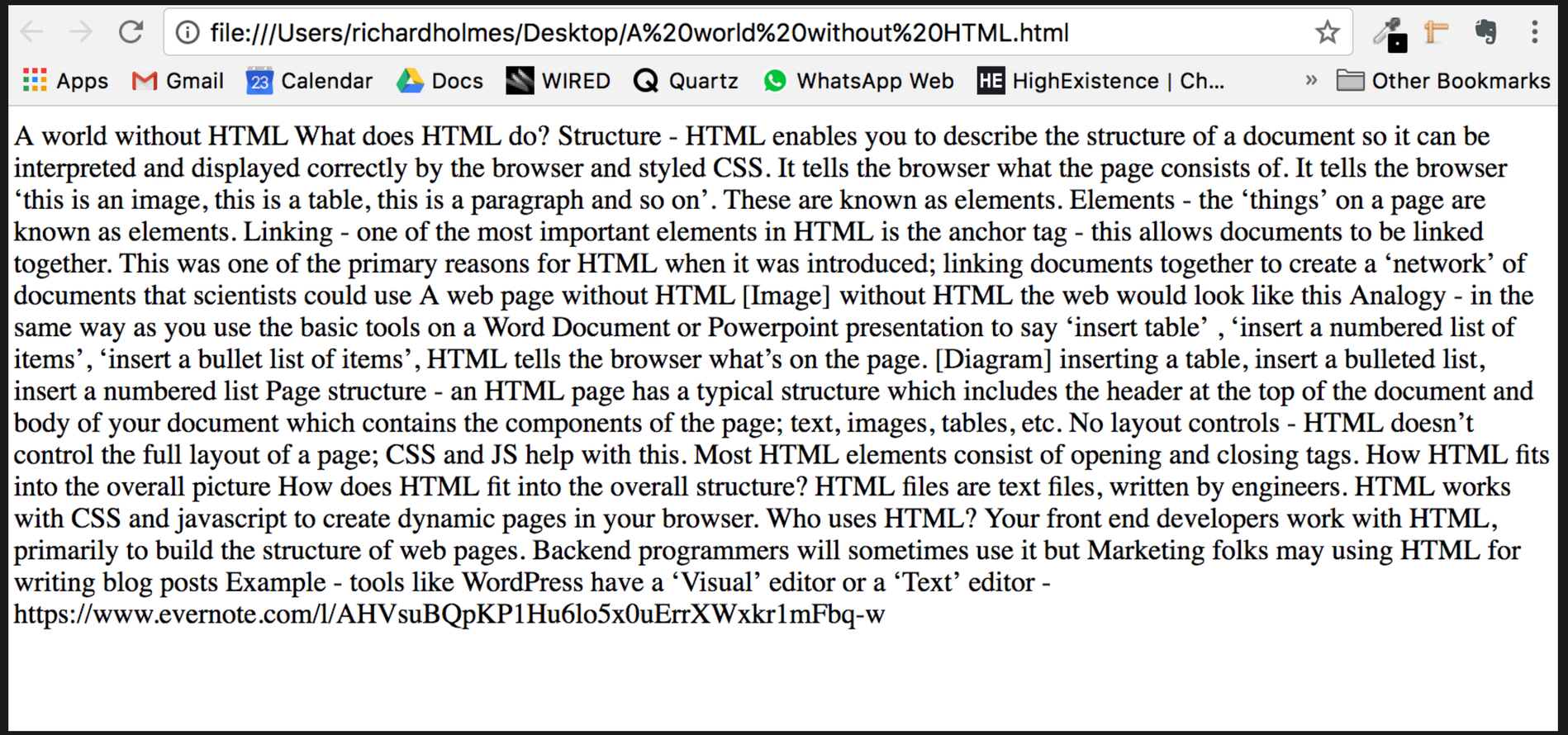
T Text

M Markup

L Language

Who uses HTML?

A world without HTML



A world without HTML

What does HTML do?

Structure -

HTML enables you to describe the structure of a document so it can be interpreted and displayed correctly by the browser and styled CSS. It tells the browser what the page consists of. It tells the browser ‘this is an image, this is a table, this is a paragraph and so on’. These are known as elements.

- Elements - the ‘things’ on a page are known as elements.
- Linking - one of the most important elements in HTML is the anchor tag - this allows documents to be linked together. This was one of the primary reasons for HTML when it was introduced; linking documents together to create a ‘network’ of documents that scientists could use

Who uses HTML?

- Your front end developers work with HTML, primarily to build the structure of web pages.
- Backend programmers will sometimes use it but
- Marketing folks may using HTML for writing blog posts
- Example - tools like WordPress have a ‘Visual’ editor or a ‘Text’ editor - https://www.evernote.com/l/AHVsuBQpKP1Hu6lo5x0uErrXWxkr1mFbq-w

File Edit View Insert Format Tools Table Add-ons Help Last edit was on 7 April 2016
Comments Share
100% Normal text Radley 10 Editing

people who use them. I'm skilled in UX, front end design/development (HTML/CSS), business/data analytics, commercial strategies and managing teams in an international set up.

Senior Product Manager, Shutl

Aug 2015 - current

Senior Product Manager at Shutl, an online delivery startup specialising in same day delivery services, acquired by eBay in 2013.

Key responsibilities and highlights include:

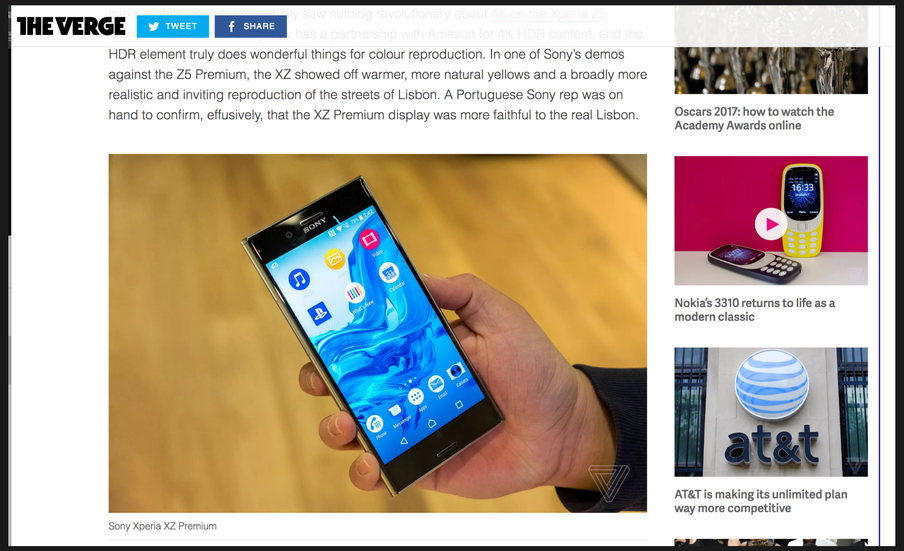
- Launched Shutl's first international delivery product in over 15 territories
- Managed the integration of merchants and international / domestic carriers via Shutl's delivery API
- Optimized business metrics including: NPS and SLA
- Set OKRs and led cross functional teams (engineering, design, operations, sales and marketing)
- Worked with eBay teams globally to launch Shutl on eBay; a new delivery proposition for eBay sellers

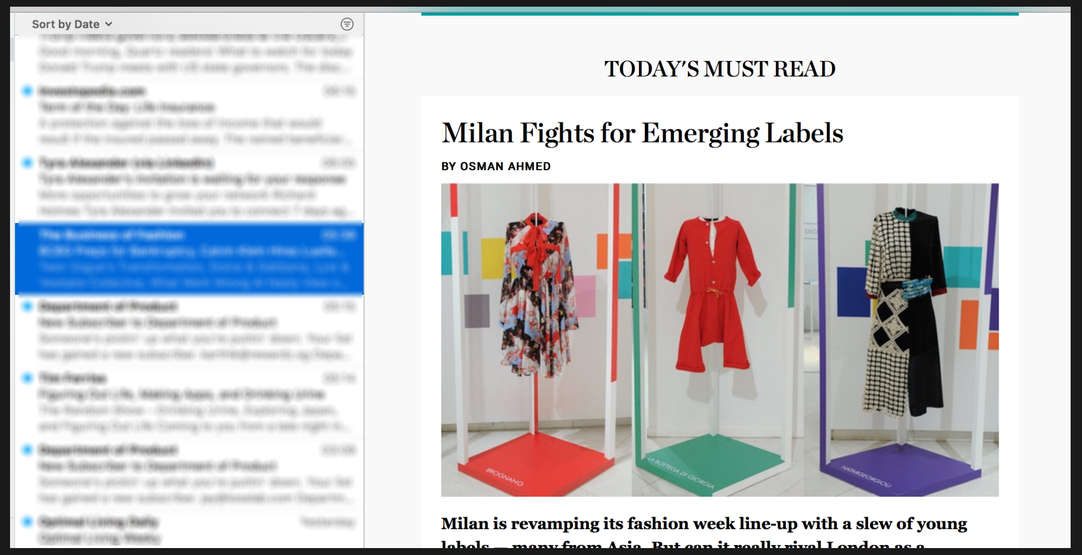
Senior Product Manager, EnglishUp (London, São Paulo)

January 2013 - Aug 2015

Employee number 2 and Senior Product Manager of an international B2C English language learning startup targeting Brazilian consumers and emerging markets, funded by Macmillan Science and Education.

When is HTML used?





Web pages

Emails

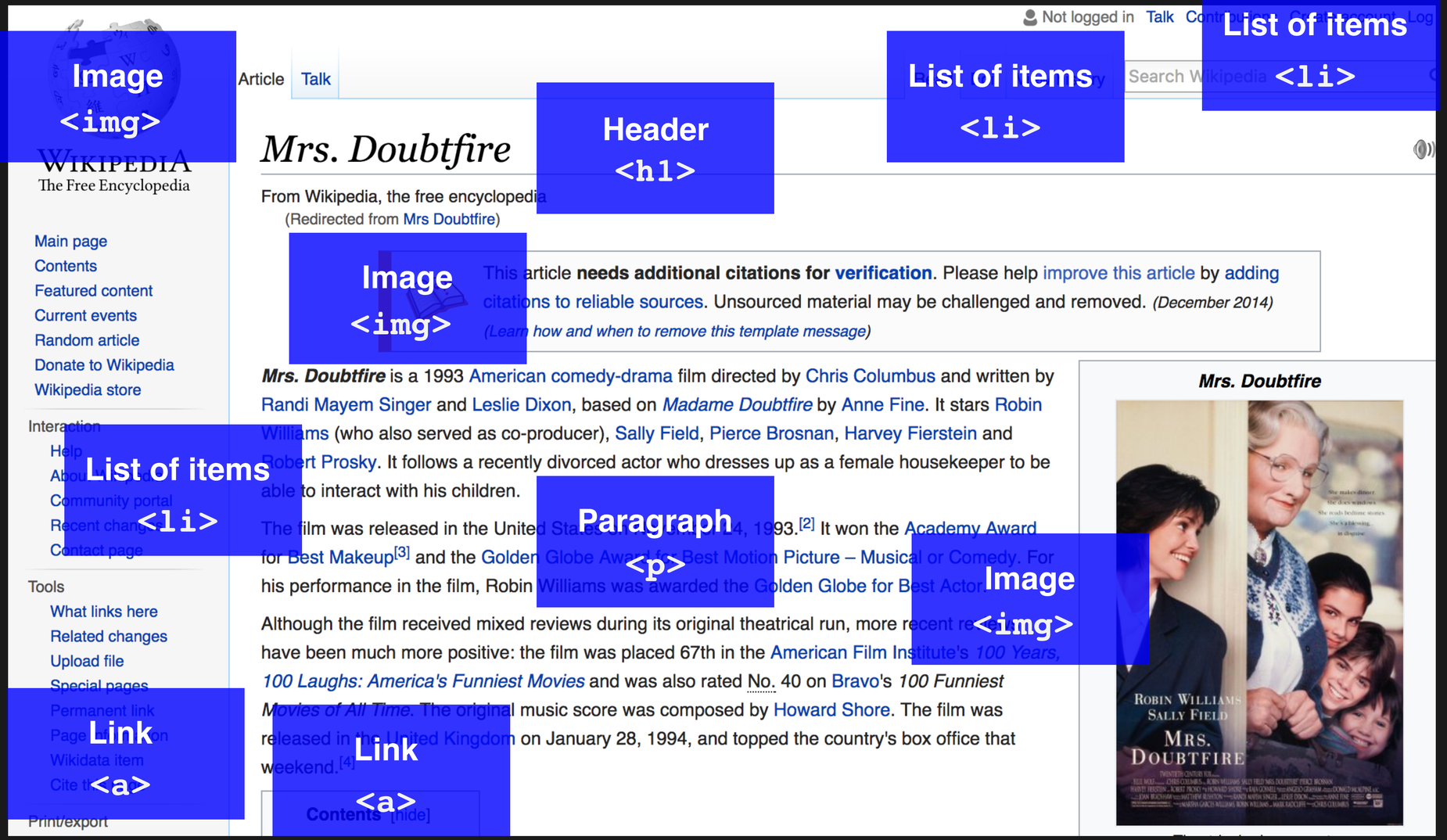
HTML syntax

```
<h1>Header</h1>
```

OPENING TAG

CLOSING TAG

What's an element?



What's an attribute?

```
<a href="http://www.link.com">Click</a>
```

ATTRIBUTE

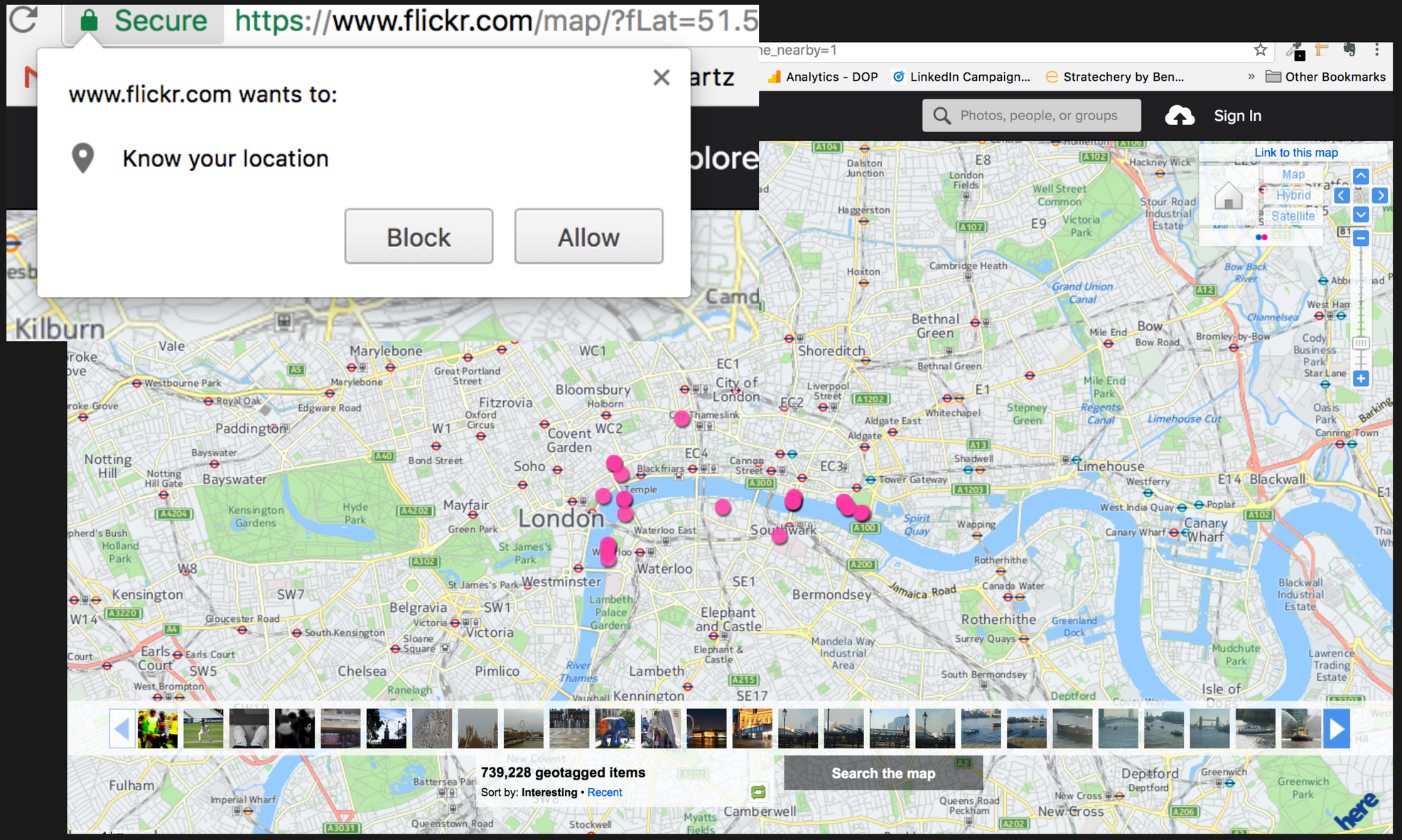
HTML page template

```
1  <!DOCTYPE html> - <!-- appears once, before any HTML tags. It helps the browser to display content correctly. -->
2  <html>
3  <head>
4  <title>Title of website</title>
5  <!-- CSS styles are put in the header-->
6  </head>
7  <body>
8  <!-- the elements of the web page are put inside the body tags. -->
9  </body>
10 </html>
```

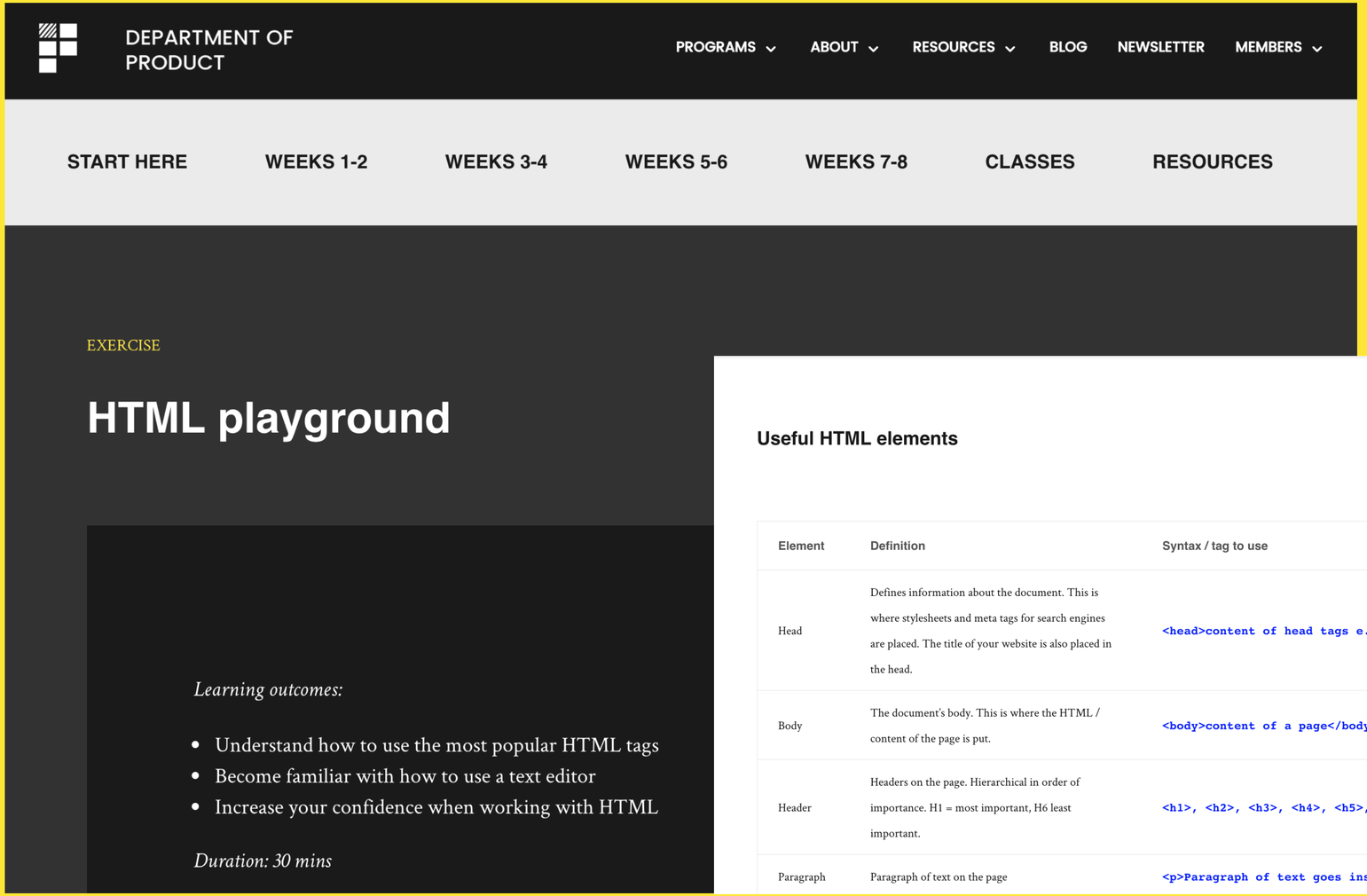
HTML

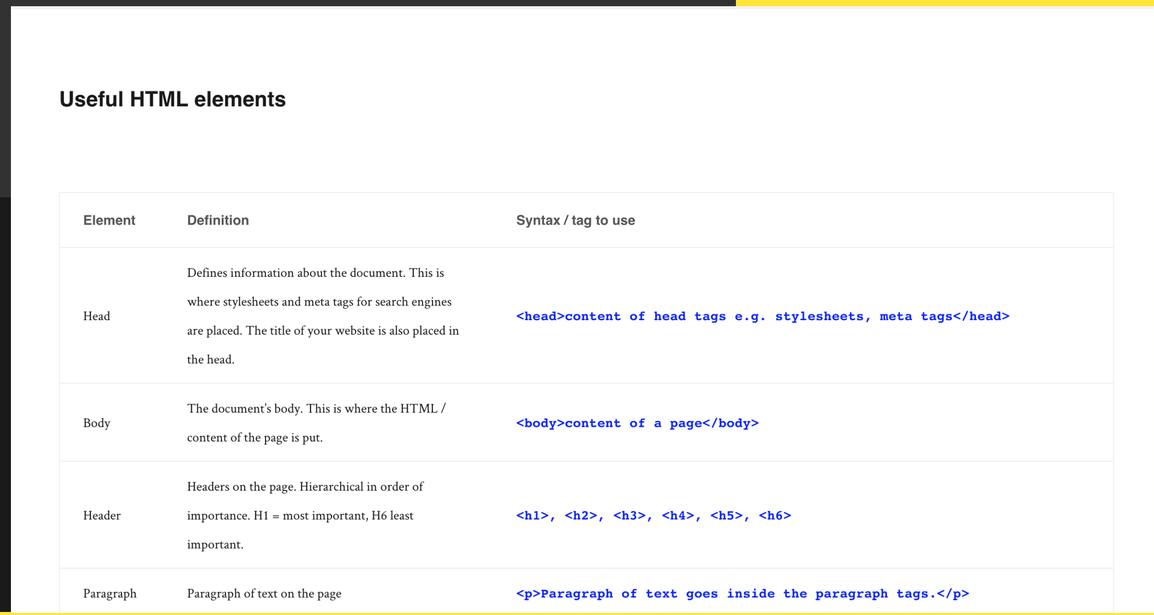
New HTML tags

Category	New elements
Structuring a page	`<article>`, `<header>`, `<footer>`, `<nav>`, `<section>`
Media	`<audio>`, `<video>`
Canvas	`<canvas>`


Secure
https://www.flickr.com/map/?fLat=51.5
www.flickr.com wants to:
Know your location
Block
Allow
Analytics - DOP
LinkedIn Campaign...
Stratechery by Ben...
Other Bookmarks
Photos, people, or groups
Sign In
Link to this map
Map
Hybrid
Satellite
739,228 geotagged items
Sort by: Interesting • Recent
Search the map

Exercise





Useful HTML elements

Element	Definition	Syntax / tag to use
Head	Defines information about the document. This is where stylesheets and meta tags for search engines are placed. The title of your website is also placed in the head.	`<head>content of head tags e.g. stylesheets, meta tags</head>`
Body	The document's body. This is where the HTML / content of the page is put.	`<body>content of a page</body>`
Header	Headers on the page. Hierarchical in order of importance. H1 = most important, H6 least important.	`<h1>, <h2>, <h3>, <h4>, <h5>, <h6>`
Paragraph	Paragraph of text on the page	`<p>Paragraph of text goes inside the paragraph tags.</p>`

HTML tags to learn

What's worth knowing as a Product Manager?

HTML style guidelines

No caps

Alt text

Spacing / indentation

HTML page template

```
1  <!DOCTYPE html> - <!-- appears once, before any HTML tags. It helps the browser to display content correctly. -->
2  <html>
3  <head>
4  <title>Title of website</title>
5  <!-- CSS styles are put in the header-->
6  </head>
7  <body>
8  <!-- the elements of the web page are put inside the body tags. -->
9  </body>
10 </html>
```

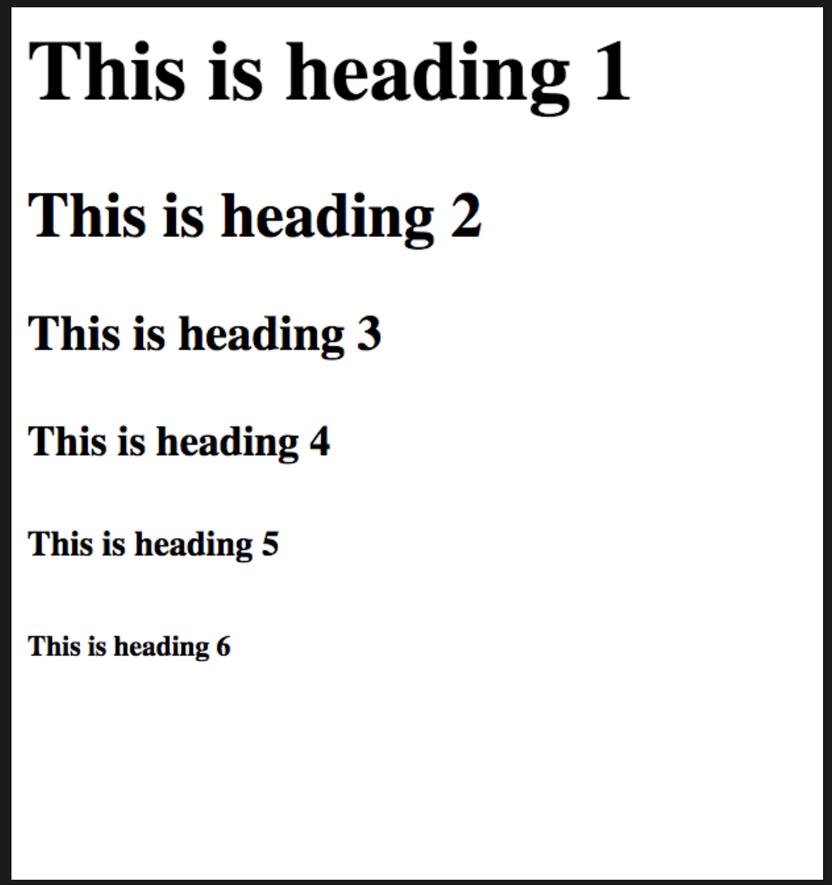
Head

```
<!DOCTYPE html> - <!-- appears once, before any HTML tags. It helps the browser to display content correctly. -->
<html>
<head>

<title>Title of website</title>
<!-- CSS styles are put in the header-->
<link rel="stylesheet" type="text/css" href="styles.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.1.1/jquery.min.js"></script>


</head>
<body>
<!-- the elements of the web page are put inside the body tags. -->
</body>
</html>
```

Headings




```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
```

Headings

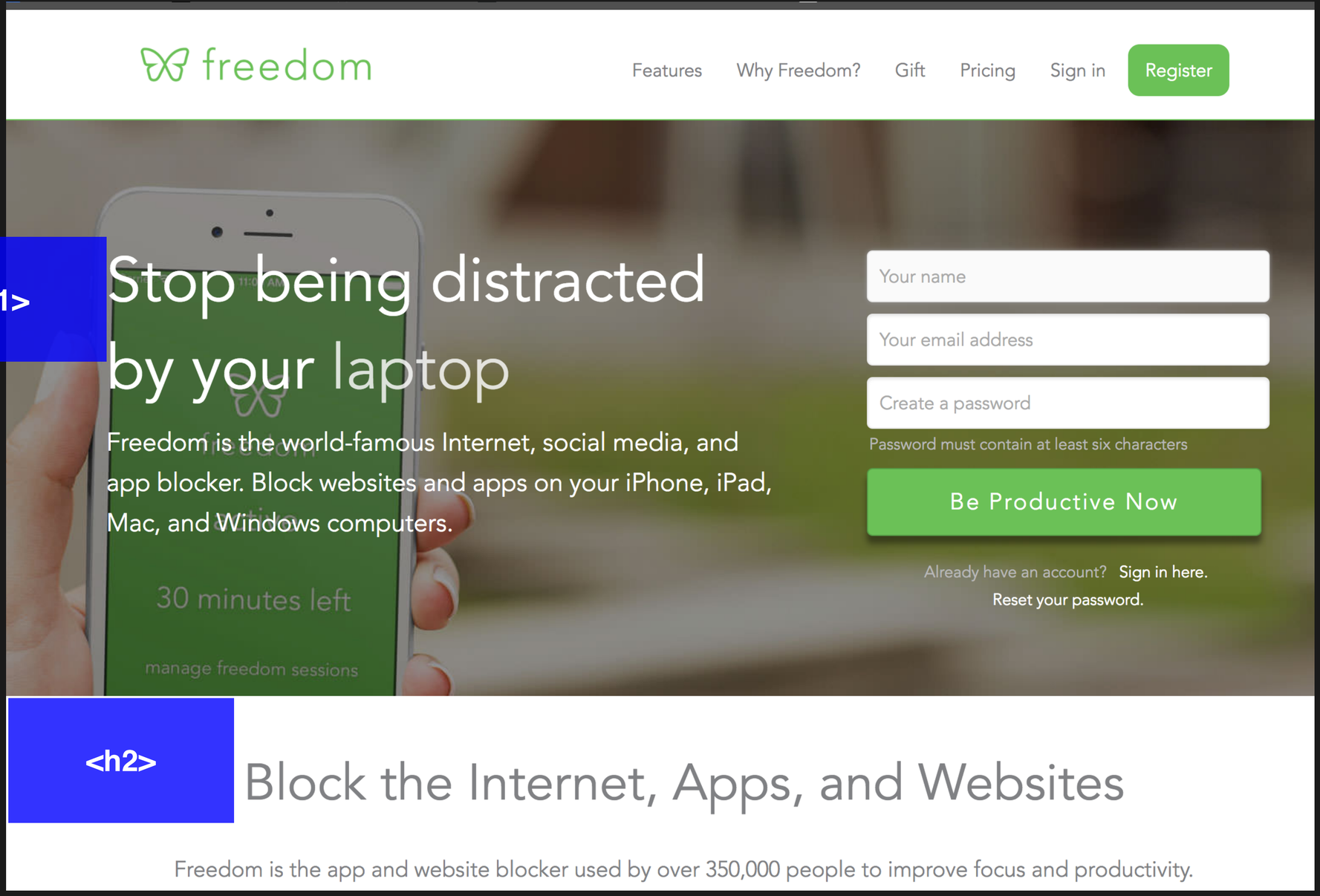
```
<h1>Heading 1</h1>
```

Example H1

```
<h1>Mrs. Doubtfire</h1>
```

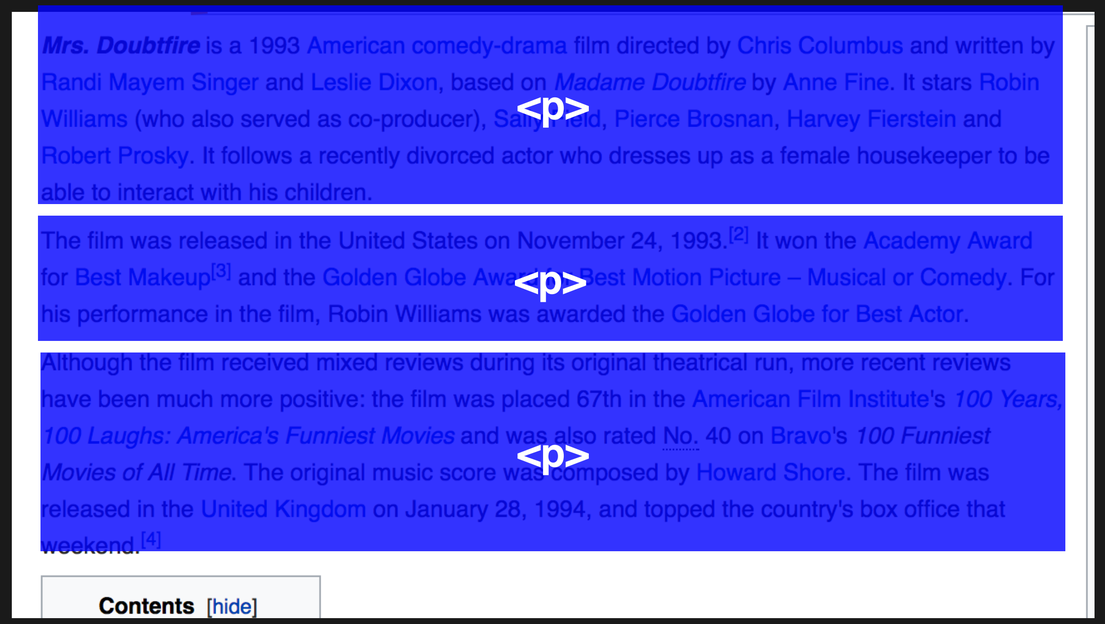
Example H2

```
<h2>Release</h2>
```


freedom
Features
Why Freedom?
Gift
Pricing
Sign in
Register
<h1>
Stop being distracted by your laptop
Freedom is the world-famous Internet, social media, and app blocker. Block websites and apps on your iPhone, iPad, Mac, and Windows computers.
30 minutes left
manage freedom sessions
Your name
Your email address
Create a password
Password must contain at least six characters
Be Productive Now
Already have an account? Sign in here.
Reset your password.
<h2>
Block the Internet, Apps, and Websites
Freedom is the app and website blocker used by over 350,000 people to improve focus and productivity.

Paragraphs

```
<p>Paragraph text here</p>
```

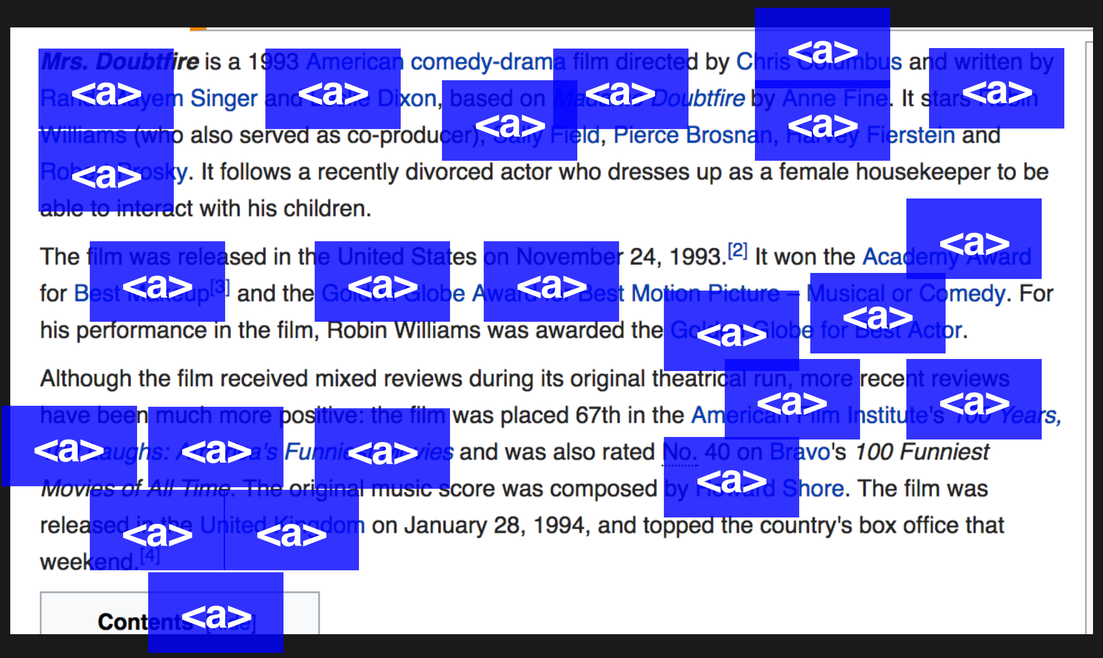


Example

```
<p>Mrs. Doubtfire is a 1993 American comedy-drama
film directed by Chris Columbus and written by Randi
Mayem Singer and Leslie Dixon, based on Madame
Doubtfire by Anne Fine. It stars Robin Williams (who
also served as co-producer), Sally Field, Pierce
Brosnan, Harvey Fierstein and Robert Prosky. It
follows a recently divorced actor who dresses up as
a female housekeeper to be able to interact with his
children.</p>
```

Links

```
<a href="http://www.link.com">Click</a>
```



Example

```
<p>Mrs. Doubtfire is a 1993 <a href="https://
en.wikipedia.org/wiki/Comedy-drama">American comedy-
drama</a> film directed by Chris Columbus and
written by Randi Mayem Singer and Leslie Dixon,
based on Madame Doubtfire by Anne Fine. It stars
Robin Williams (who also served as co-producer),
Sally Field, Pierce Brosnan, Harvey Fierstein and
Robert Prosky. It follows a recently divorced actor
who dresses up as a female housekeeper to be able to
interact with his children.</p>
```

Images

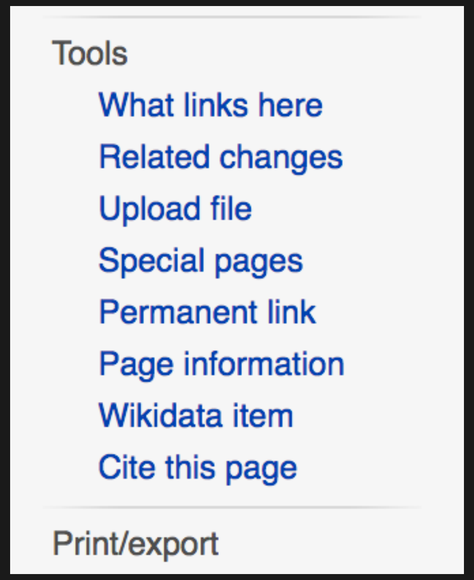
```
<img src="http://www.link.com/img.jpg"
  alt="a description of the image" >
```

Example

```
<img src="https://upload.wikimedia.org/wikipedia/en/
5/5a/Mrs_Doubtfire.jpg" alt="an image of mrs
doubtfire" >
```

Lists

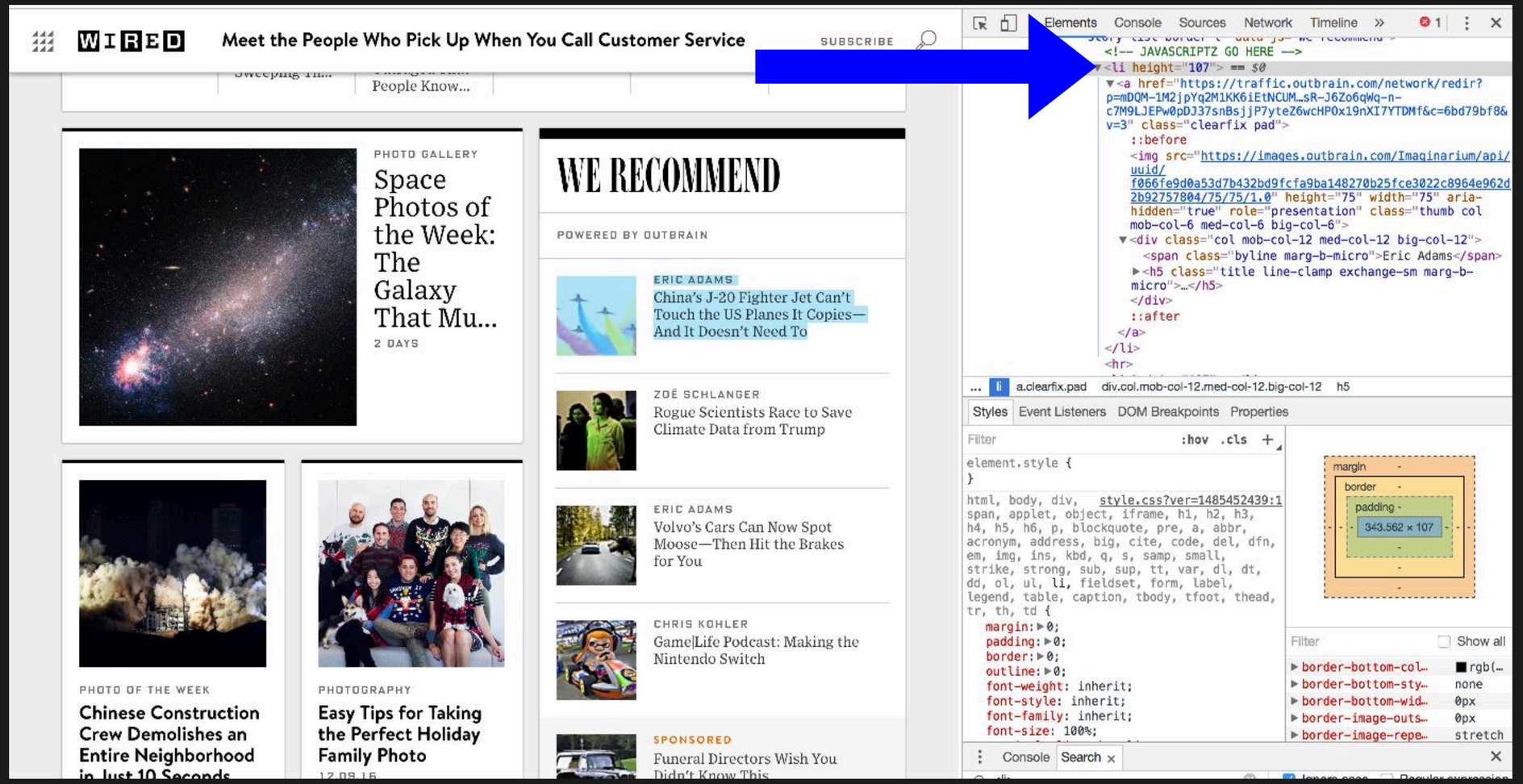
```
<ul>
<li>List item</li>
</ul>
```



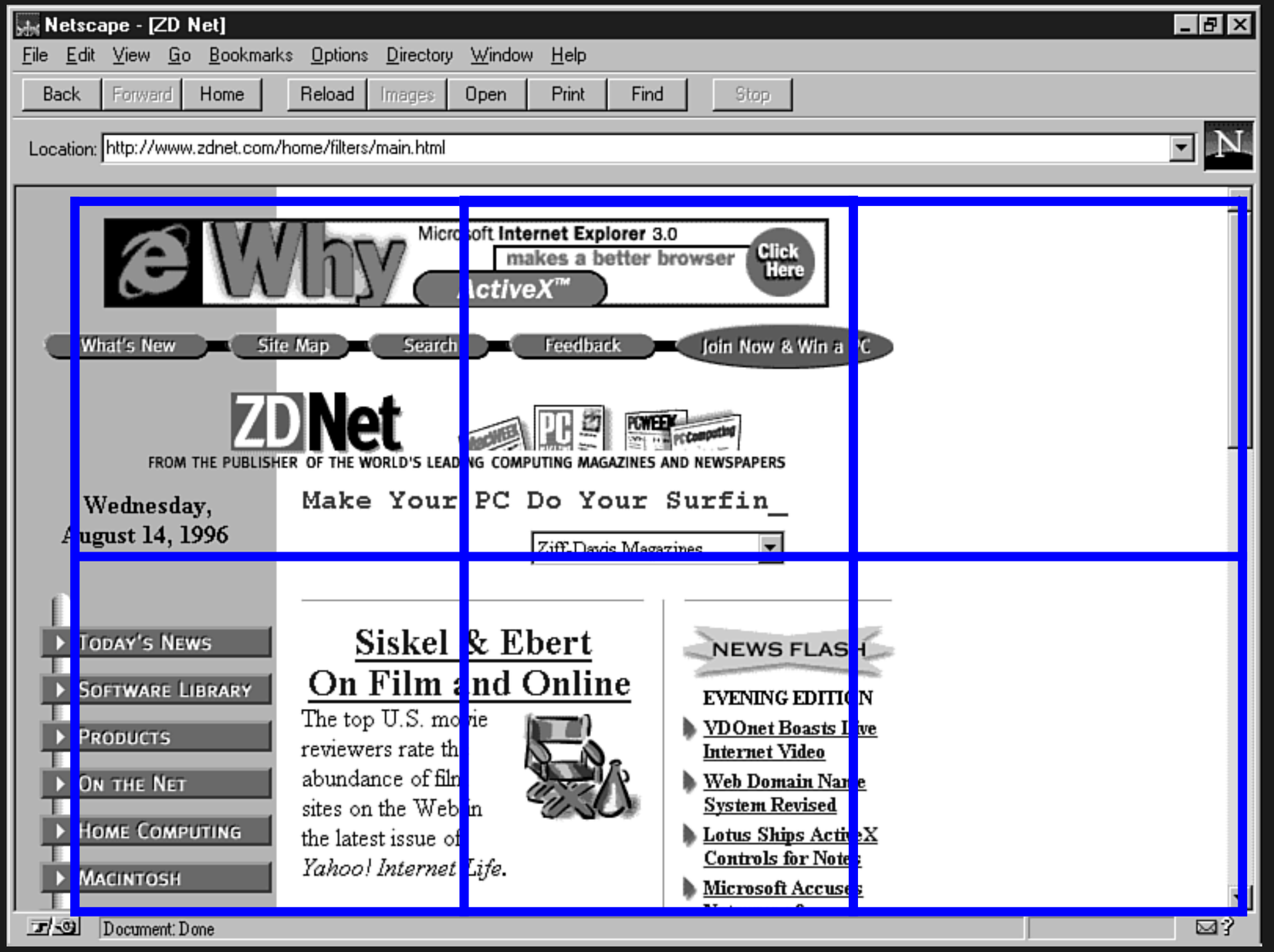
Example

```
<ul>
<li>What links here</li>
<li>Related changes</li>
<li>Upload file</li>
<li>Special pages</li>
<li>Permanent link</li>
<li>Page information</li>
<li>Wikidata item</li>
<li>Cite this page</li>
</ul>
```

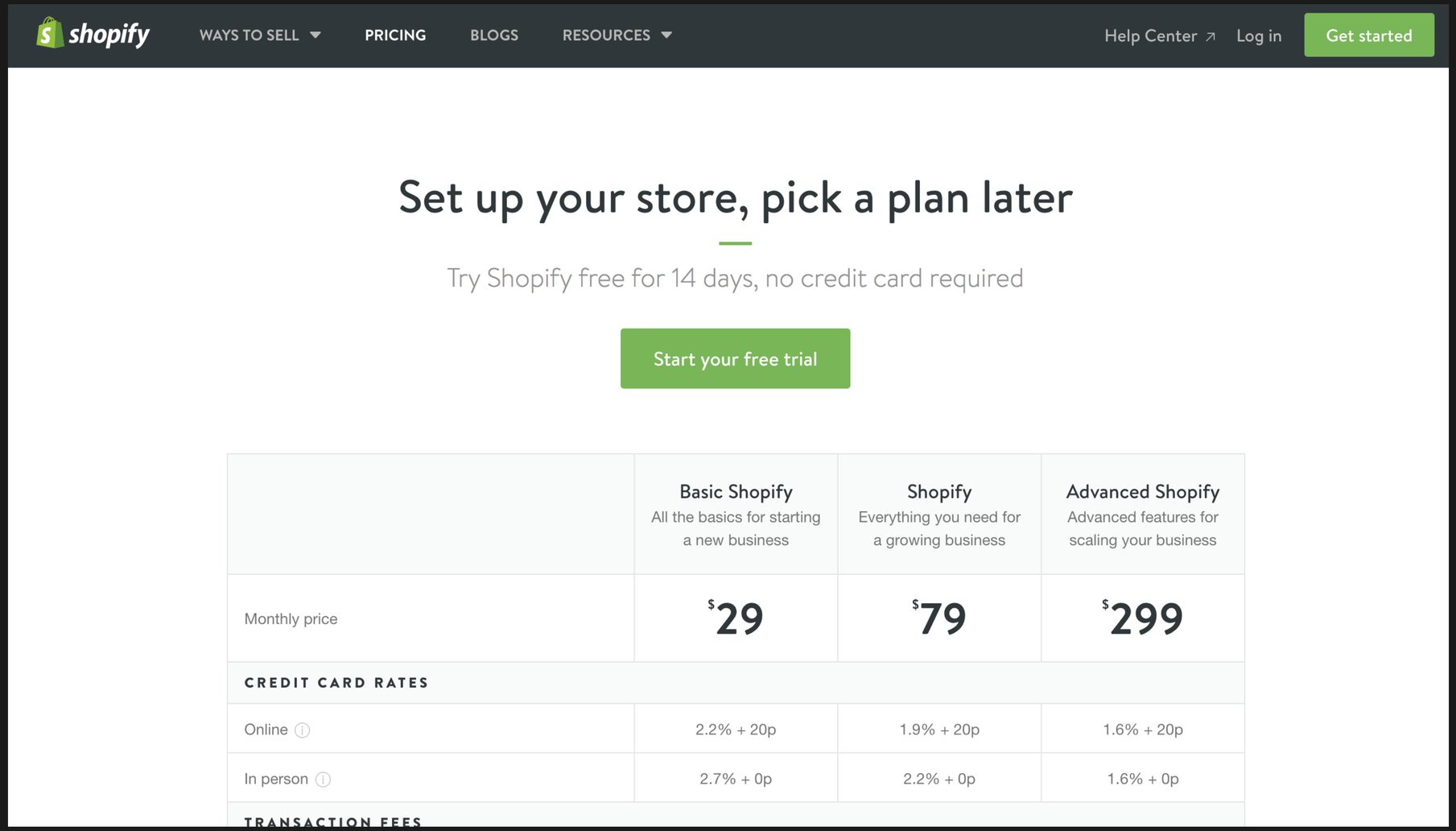
Lists - example



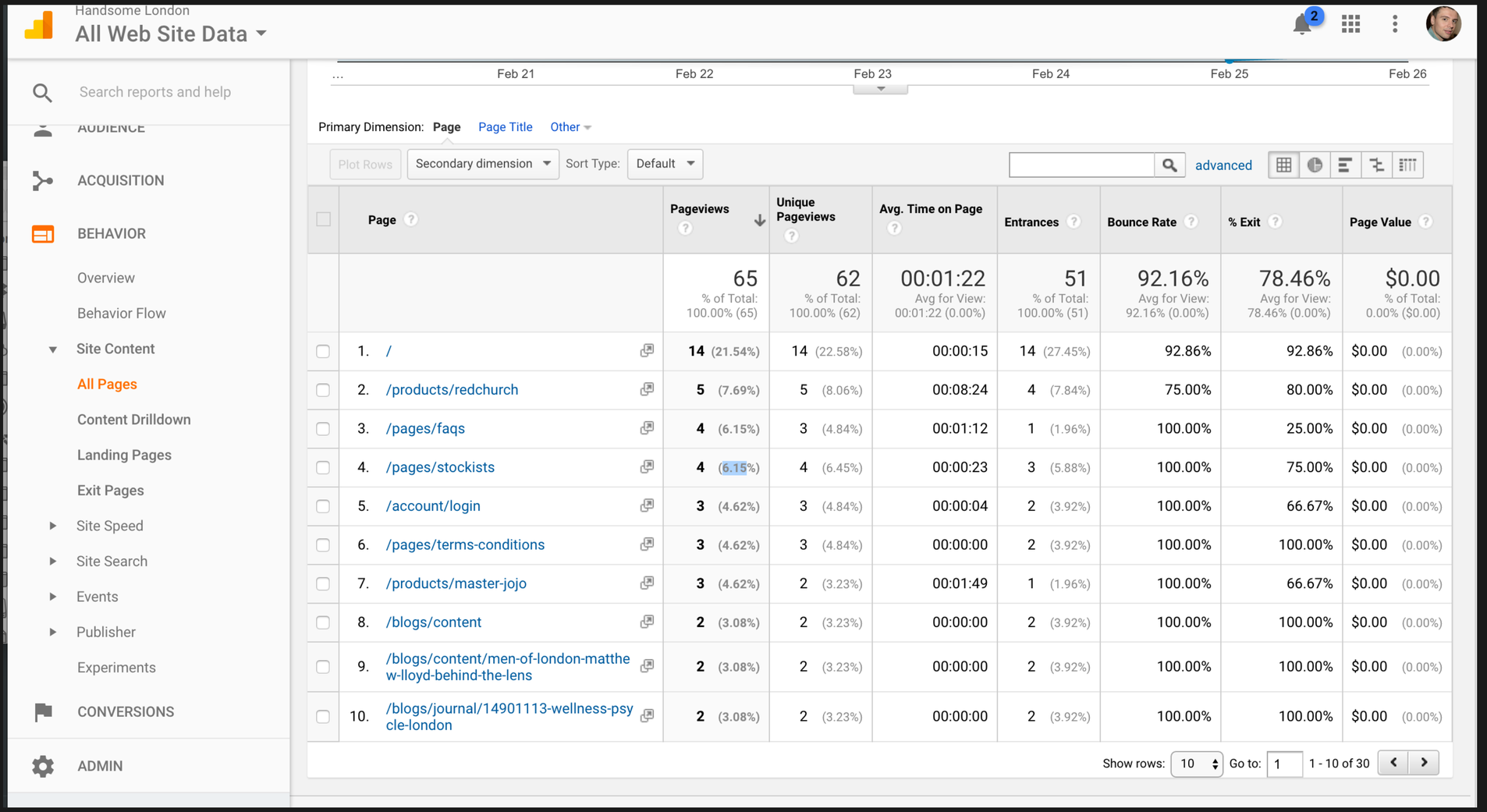
Tables


Netscape - [ZD Net]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find Stop
Location: http://www.zdnet.com/home/filters/main.html
Why
Microsoft Internet Explorer 3.0
makes a better browser
ActiveX™
Click Here
What's New
Site Map
Search
Feedback
Join Now & Win a PC
ZDNet
FROM THE PUBLISHER OF THE WORLD'S LEADING COMPUTING MAGAZINES AND NEWSPAPERS
Wednesday,
August 14, 1996
Make Your PC Do Your Surfin_
Ziff-Davis Magazines
TODAY'S NEWS
SOFTWARE LIBRARY
PRODUCTS
ON THE NET
HOME COMPUTING
MACINTOSH
Siskel & Ebert
On Film and Online
The top U.S. movie
reviewers rate th
abundance of film
sites on the Web in
the latest issue of
Yahoo! Internet Life.
NEWS FLASH
EVENING EDITION
VDOnet Boasts Live
Internet Video
Web Domain Name
System Revised
Lotus Ships ActiveX
Controls for Notes
Microsoft Accuses
Document: Done

Tables - example



Tables - example



Tables

Firstname	Lastname	Age
Geri	Halliwell	50
Ian	Malcolm	45

```
<table>

<tr>
<th>Firstname</th>
<th>Lastname</th>
<th>Age</th>
</tr>


<tr>
<td>Geri</td>
<td>Halliwell</td>
<td>50</td>
</tr>

<tr>
<td>Ian</td>
<td>Malcolm</td>
<td>45</td>
</tr>


</table>
```

Divs

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We are in the middle of a technological upheaval that will transform the way society is organized. We must make the right decisions now

By Dirk Helbing, Bruno S. Frey, Gerd Gigerenzer, Ernst Hafen, Michael Hagner, Yvonne Hofstetter, Jeroen van den Hoven, Roberto V. Zicari, Andrej Zwitter on February 25, 2017

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Divs

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pentaho

Divs

```
<div id=“box”>
Content
</div
```

Example

```
<div id =“spokenWikipedia”>
<audio></audio>
<a href=“”>More spoken articles”</a>
</div>
```

Comments

```
<!-- This is a comment in HTML -->
```

Resource library

HTML Tags

Element	Definition	Syntax / tag to use

Head	Defines information about the document. This is where stylesheets and meta tags for search engines are placed.	`<head>`
		`content of head tags e.g. stylesheets, meta tags`
		`</head>`

Body	The document's body	`<body>`
		`content of a page`
		`</body>`

Header	Headers on the page	`<h1>, <h2>, <h3>, <h4>, <h5>, <h6>`
		`<p>Paragraph of text goes inside the paragraph tags.</p>`
tes / documents		`<a href="link">Link text</a>`

for lists of		`<ul>`
		`<li>List item goes here</li>`
		`</ul>`

		`<ol>`
		`<li>List item</li>`
		`</ol>`

		`<img src="link to image" alt="alternative text describing the content of the image">`

		`<table>`
		`  <tr>`
		`  <th>Table header 1</th>`
		`  <th>Table header 2</th>`
		`  <th>Table header 3</th>`
		`  </tr>`
		`  <tr>`
		`  <td>Jill</td>`
		`  <td>Smith</td>`

fx Tag

	A	B	C	D
1	**Tag**	**Description**		
2	<!--...-->	Defines a comment		
3	<!DOCTYPE>	Defines the document type		
4	<a>	Defines a hyperlink		
5	<abbr>	Defines an abbreviation or an acronym		
6	<acronym>	Not supported in HTML5. Use <abbr> instead.Defines an acronym		
7	<address>	Defines contact information for the author/owner of a document		
8	<applet>	Not supported in HTML5. Use <embed> or <object> instead.Defines an embedded applet		
9	<area>	Defines an area inside an image-map		
10	<article>	Defines an article		
11	<aside>	Defines content aside from the page content		
12	<audio>	Defines sound content		
13	<b>	Defines bold text		
14	<base>	Specifies the base URL/target for all relative URLs in a document		
15	<basefont>	Not supported in HTML5. Use CSS instead.Specifies a default color, size, and font for all text in a document		
16	<bdi>	Isolates a part of text that might be formatted in a different direction from other text outside it		
17	<bdo>	Overrides the current text direction		
18	<big>	Not supported in HTML5. Use CSS instead.Defines big text		
19	<blockquote>	Defines a section that is quoted from another source		
20	<body>	Defines the document's body		
21	 	Defines a single line break		
22	<button>	Defines a clickable button		
23	<canvas>	Used to draw graphics, on the fly, via scripting (usually JavaScript)		
24	<caption>	Defines a table caption		
25		Not supported in HTML5. Use CSS instead.Defines centered text		
26	<cite>	Defines the title of a work		
27	<code>	Defines a piece of computer code		
28	<col>	Specifies column properties for each column within a <colgroup> element		

Let’s play