

an introduction to  
the world wide web

# internet vs. WWW

Internet is not the World Wide Web

Internet:

- computers connected on a network

- around in some shape or form since late 1960s

- used a command line interface (Windows DOS or Unix)

- no “presentation layer”

# a brief history

Tim Berners-Lee

English physicist

Working at CERN (European Particle Physics Laboratory)

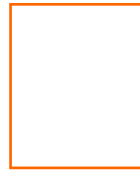
Around 1989: needed a way to share research among internal scientists

World Wide Web:

System of publishing content (html)

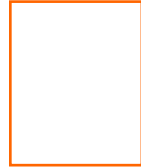
System of addresses (url)

Protocol for traversing between pages of content (http)

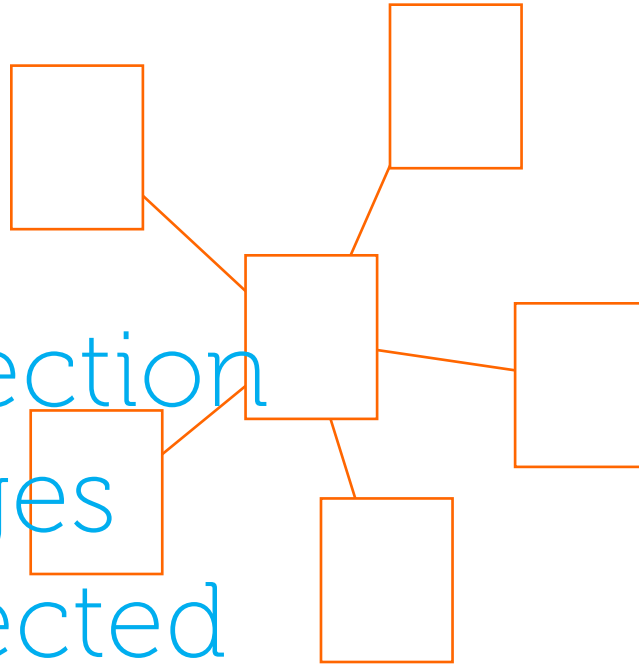


it starts with  
**one page**

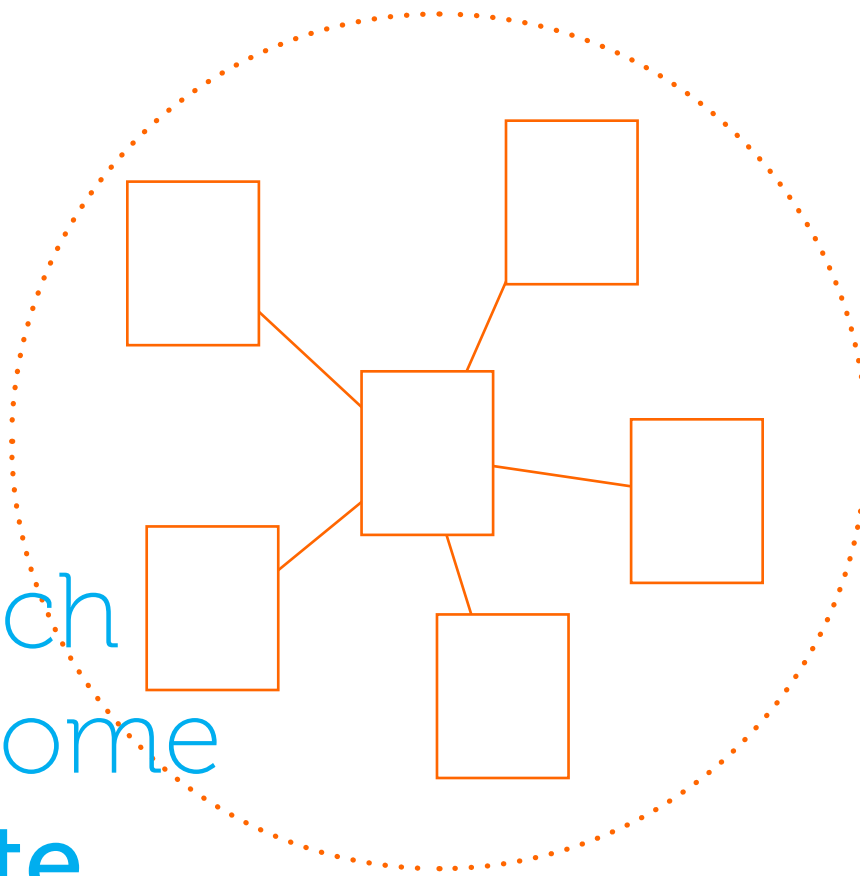
which become  
a **collection**  
of pages

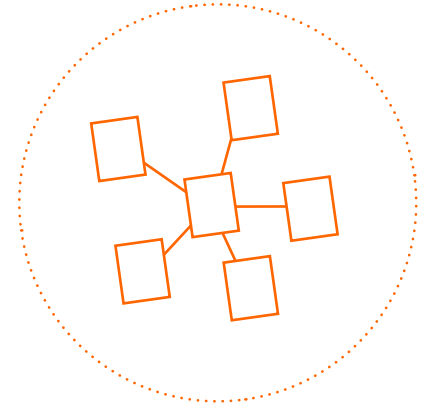
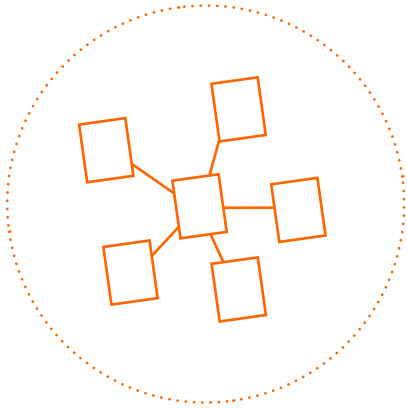


a collection  
of pages  
connected  
**with links**

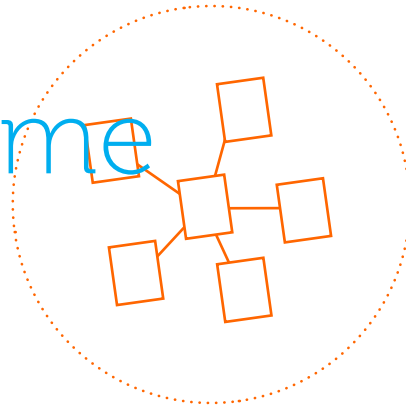


which  
become  
a **site**

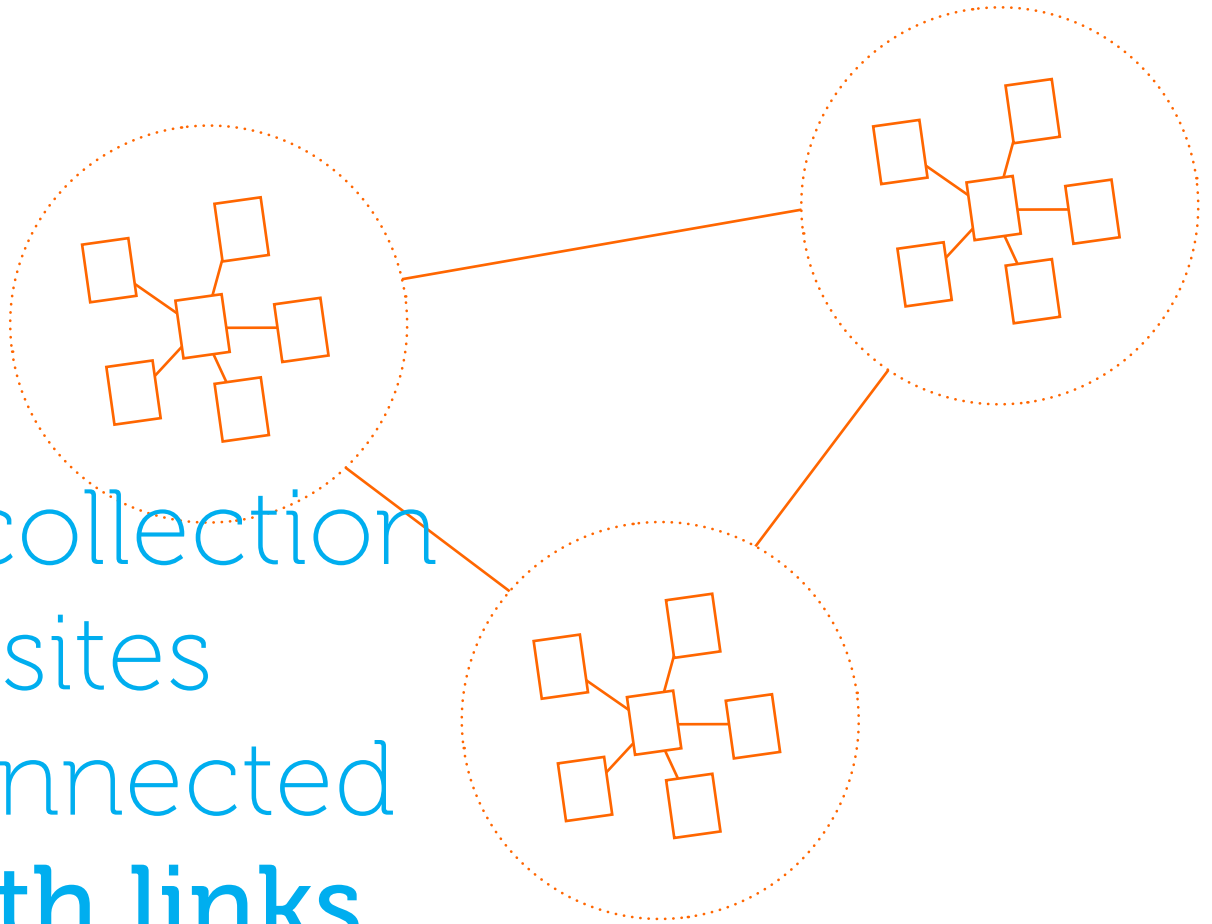




which become  
a collection  
of **sites**



a collection  
of sites  
connected  
**with links**



# philosophy

Intended to provide universal access to knowledge:

Simple syntax - all education levels could write it

No special software needed - all income levels could participate

Nationless - no government control

Some downsides

Voluntary standards

No regulatory control

Commercial competition in browsers

Advantages to early adopters

# how big is it?

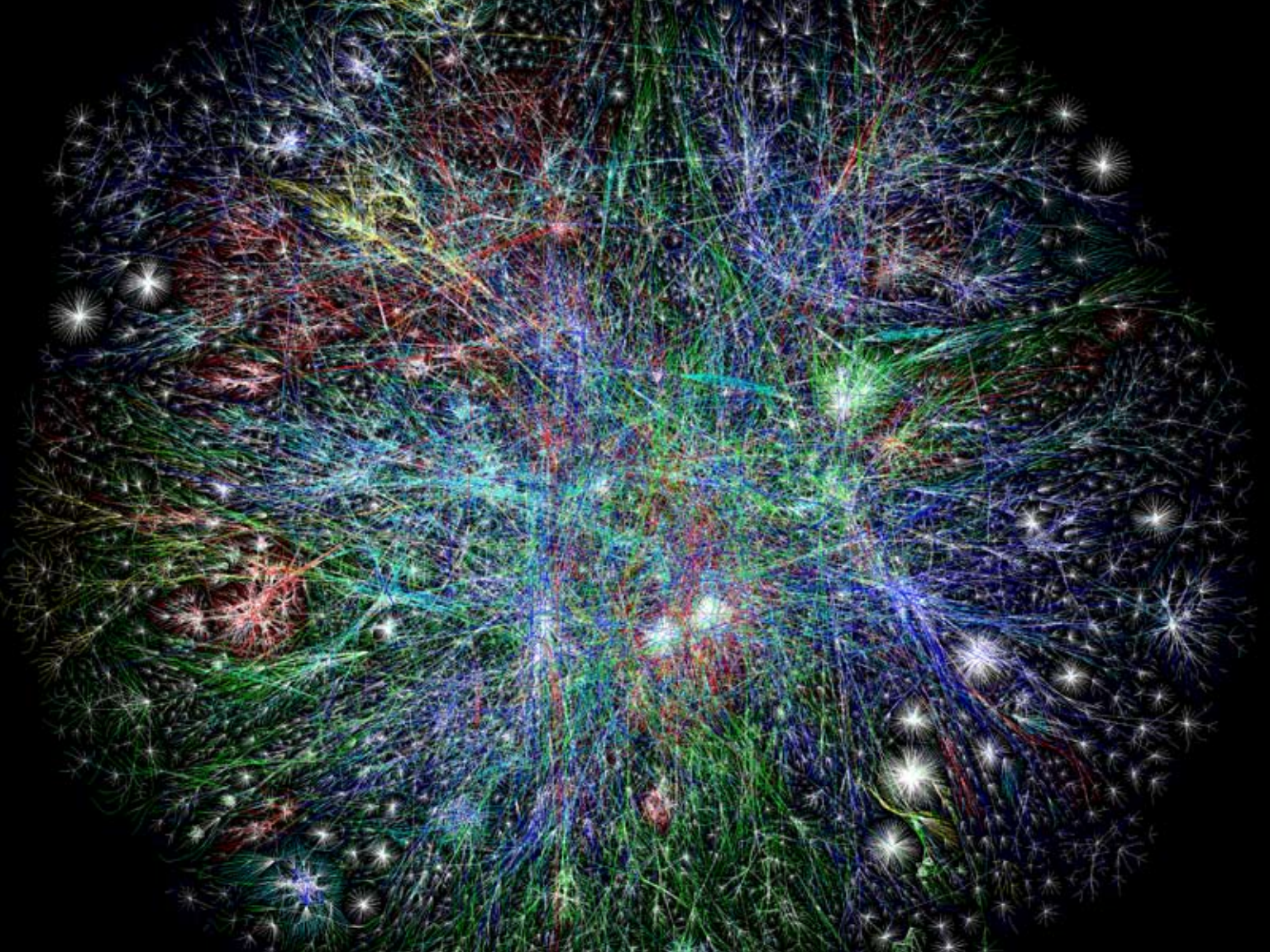
1990: Started with one server in Berners-Lee's office

2008:

1.4 billion people

1 billion computers

21% of worlds population



an introduction  
to html

# html

My strategy:

Simplified, highest level html

Intentionally leaving out visual formatting like color/border/etc

CSS comes next week

**h**yper-

**t**ext

**m**arkup

**l**anguage

# html

text markup:

- a formatting language

- not a programming language

can be created with any text editor

end like this:

- index.html

- pagename.htm

# html: formatting content

HTML determines the formatting of text on a web page

It tells your browser:

- the hierarchy of text

- where to images are located

- creates links to other pages

# html: tags

Anything contained within a set of `<>` is called a tag.

`<html>` is an opening tag

`</html>` is a closing tag

There will always be an opening and closing tag.

Tags are nested.

# html: text hierarchy

The most basic tags tell the browser about the hierarchy of content in a page.

Headlines:

```
<h1>I am the most important text on a page.</h1>
```

```
<h2>I am usually the subtitle of the page.</h2>
```

```
<h3>I am usually a subhead.</h3>
```

Paragraph

```
<p>Anything thats not a header is a paragraph.</p>
```

```
<p>You can have more than one of them.</p>
```

# html: text hierarchy

Which looks something like this in your browser:

**I am the most important text on this page.**

**I am usually the subtitle of the page.**

**I am usually a subhead.**

Anything that's not a header is a paragraph.

You can have more than one of them.

Notice that html has predefined display rules for tags

Cascading stylesheets (CSS) allow us to override them.

# html: text hierarchy

```
<p>
```

Sometimes in a paragraph we need things to stand out,  
either by making things

```
<em>italic</em> or
```

```
<strong>bold</strong> or
```

```
<em><strong>both</strong></em>.
```

```
</p>
```

Sometimes in a paragraph we need things to stand out, either by making things *italic* or **bold** or *both*.

# html: text hierarchy

`<p>`

Sometimes in a paragraph we need to force a line

to `<br />`

break `<br />`

in the middle of a sentence.

`</p>`

Sometimes in a paragraph we need  
to force a line  
to  
break  
in the middle of a sentence.

# html: lists

<p>An unordered list (ul):

```
<ul>
```

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

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

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

```
</ul>
```

```
</p>
```

<p>An ordered list (ol):

```
<ol>
```

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

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

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

```
</ol>
```

```
</p>
```

# html: links

A link tag looks like this:

```
<a href="pagetolinkto.html">Link Text</a>
```

The extra bit inside the `<a></a>` tag is called an **attribute**.

## **href:**

tells the browser the name of the page to link to

can be a page on your site, or a url anywhere online

# in class

We will create three pages:

## **An index page:**

named index.html

## **A bio page**

named bio.html

Information about you.

## **Resume page**

named resume.html

education

work experience

skills