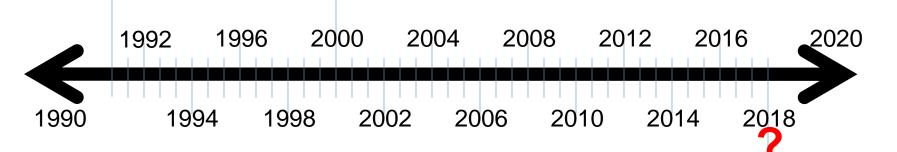
Tim Berners-Lee authors **HTML** in 1991, assisted by his colleagues at CERN, an international scientific organization based in Geneva, Switzerland.

The first version of **XHTML**, XHTML 1.0 became a W3C recommendation in **2000**.



**HTML5** was published as a **Working Draft** by the The World Wide Web

Consortium (W3C) in 2007. Originally slated to be fully implemented by 2010, that date has been theorized to be as late as 2022.

## How HTML is different than XHTML

- XHTML is a cleaner and stricter version of HTML
- XHTML is HTML defined as an XML (eXtensible Markup Language) application
  - XML is designed to describe data, and HTML is designed to display data.
- Valid and Well-formed XHTML document
  - XHTML tags must be lowercase
  - XHTML tags must be properly nested (aka properly ordered)
  - XHTML elements must always be closed
  - Empty elements like <br > must also be closed like <br />
  - Attribute values must be quoted like width="100"
  - Etc.

## HTML5 is the future of HTML

- HTML5 is the next generation of HTML.
- HTML5 is still a work in progress. Not all browsers have HTML5 support.
- HTML5 addresses today's internet needs by including new elements for media content, better structure, drawing, & better form handling.

## **New features of HTML5**

- Better support for local offline storage
- New form controls like: calendar, date, time, email, url, search, etc.
- The canvas element for sketching
- The video and audio elements for media playback
  - Allows video and audio to be tagged easier (like images)... such as
     <video src=...> and <audio src=...>
- New content specific elements such as article, footer, header, navigation, section, etc.
- Full duplex communication channels can be established with Server using Web Sockets. Accessible using JavaScript interface in HTML5 compliant browsers.
- Better JavaScript Support

## **Conclusion**

- You could use either XHTML or HTML5 for this course.
- You MUST make sure the html file are valid.
- Invalid htmls might look alright in the browsers, but they will be considered as invalid input/output for this course.
- Use W3C validation service for the html files or the output of your program.
- Please note that browsers handle htmls/javascript etc slightly differently. So test the output in different browsers.