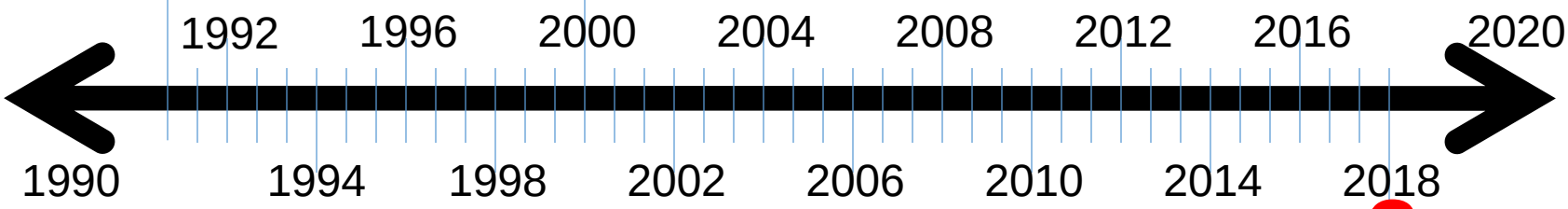
Tim Berners-Lee authors **HTML in 1991**, assisted by his colleagues at CERN, an international scientific organization based in Geneva, Switzerland.

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
 must also be closed like
  - Attribute values must be quoted like **width="100"**
  - Etc.

HTML5 is the future of HTML

- Fifth and current major version of HTML
- Two standards:
  - HTML 5.2 Recommendation by W3C
  - HTML Living Standard by WHATWG

- 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.