## HTML(Hypertext markup language)

- Front End Development
  - Browser--sent the request-->Web server (the actual website address)---sent the response to the browser:static website
  - Front end: the developer writing the code that is display in a browser using HTML/CSS/JS
- Back End Development (the invisible part of website)
  - Web Server with App and Database: dynamic website
  - with Node.JS/PHP/Python for taking data out of the database
- Languages
  - HTML: the content of the page: text, image, buttons (NOUNS)
  - CSS: presentation of content (ADJ)
  - JS: actual programming language for dynamic effects and web applications (VERBS)
- Elements
  - HTML is a markup language
  - Three Parts
    - opening tag: the name of the element, wrapped in <>
    - Content: content of elements, or of child element, no content elements(<img>)
    - closing tag: when elements have no content, it is omitted, wrapped in </>
- Common HTML Structure
  - <!DOCTYPE html>: this document uses HTML
  - <a href="https://html-.opening.and.ending.tag">httml lang="en"> </a> </a>/html>:opening.and.ending.tag
    - <head></head>: to break up text into more logical sections and add title to each section
      - <meta charset="UTF-8"/>
      - <title></title>
    - <body></body>
      - <h1></h1>
- Text Elements
  - comment: simply hide some code, or just give codes some comments
    - <!-->
  - Bold:
    - <b> </b>: an element but do not have any meaning
    - <strong> </strong>: more important text, it has a meaning, semantic html

- Italics
  - <j></j>
  - <em></em>:emphasize
- List
  - An ordered list
    - abcdef ...
    - abcdef...
    - .....
  - Bullet Point

    - <|i> </|i>
    - .....
- Image and Attributes
  - <img src="copy the path" alt="..." width="..." height="..."/>
  - source path ,text describe , and the size of the image
- Links
  - <a href="URL\_web\_address" target="\_blank"> text for URL name </a>
    - a: stands for anchor
    - target="\_blank" for open the link as a new one, the original web set still shown
  - create a new webpage .html and use it in our main web set
    - href="#": just a black link without anything
- Page Structure (Grouping)
  - Navigation: <nav> the navigation links are listed here </nav>
  - Top part of web document: <header></header>
  - Article element:container element<article> </article>,inside it can also grouped by <header></header></pi>
  - Copyright statement: <footer> state our copyright here with &copy; </footer>. The html
    entities
  - <aside> </aside>
- Semantic HTML
  - <div> to replace <header> or <article> elements