Announcements

- Checking wam pages
DOM (Document Object Model)

- DOM – representation of the elements of a web page (e.g., headings, lists, paragraphs, styles, etc.) used by a JavaScript programs to manipulate web page elements.
- DOM – Allows JavaScript programs to dynamically access and update the content, structure, and style of documents.
  - From a JavaScript program you can control the image displayed in your page every hour.
  - From a JavaScript program you can let users decide what background color to use.
  - You could add/remove new items from a list
  - Others.
DOM (Document Object Model)

- DOM represents elements of a web page as a tree structure consisting of nodes
  - Each pair of tags (e.g., `<p>`, `</p>` ) is represented by a node
  - Three types of nodes
    - text nodes
    - element nodes
    - attribute nodes
- Manipulation of these nodes allows a JavaScript program to access any information present in a web page.
Example DOM for HTML File

```html
<html>
  <head><title>DOM Example</title></head>
  <body>
    <p id="message">Traveling the road less traveled. </p>
  </body>
</html>
```
DOM (Document Object Model)

- To access any element of your web page you could traverse the tree
  - Easier approach
    - `document.getElementById` method
      - Returns element with specified id
    - `getElementsByTagName` method
      - Can be used with document and every single element node
      - Returns a list of nodes (array)
  - To read and write attributes of an element “elem”
    - `elem.getAttribute("nameOfAttribute")`
    - `elem.setAttribute("nameOfAttribute", "newValue")`
- **Example**: AccessingDom.html
Animations

- We can create animations by using the DOM
- **Example:** AccessingDOM.html
DHTML

- **DHTML (Dynamic HTML)** – It is a combination of HTML, CSS, and JavaScript where scripts dynamically alter the style of a document.