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Internet and Web Programming (CISC-3300-R01)

Fordham University

**Homework 5**

1. Ternary operator to create a variable:
   1. let weather = "sunny";

let activity = (weather === "sunny") ? "Go to the park" : "Stay indoors";

1. Looping through an object’s properties:
   1. let person = {

name: "Alice",

age: 25,

occupation: "Developer"

};

for (let key in person) {

if (person.hasOwnProperty(key)) {

console.log(person[key]);

}

};

1. Creating a squared numbers array using `map`:
   1. let numbers = [1, 2, 3, 4, 5];

let squares = numbers.map(number => number \* number);

1. **DOM**: The Document Object Model (DOM) is a programming interface for web documents. It represents the page so that programs can change the document structure, style, and content. The DOM represents the document as a tree of nodes and objects; this makes a web page a document tree, and every part of the document is a branch or node on this tree. The DOM tree includes every object on the web page, like the document itself, headings, paragraphs, and so on.
2. **XSS Attack**: Cross-Site Scripting (XSS) is a security vulnerability typically found in web applications. It enables attackers to inject client-side scripts into web pages viewed by other users. An XSS vulnerability arises when an application includes untrusted data in a web page without proper validation or escaping, allowing attackers to execute scripts in the victim's browser which can hijack user sessions, deface web sites, or redirect the user to malicious sites. To guard against XSS attacks, developers should use functions that systematically escape user input, adhere to Content Security Policy (CSP) guidelines, validate and sanitize all input, and use secure frameworks which automatically handle these protections.
3. See homework5.html