**Course: Software Construction & Development**

**Course ID: CSCL-2126**

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**Lecture # 1**

**Topics Covered:**

1. Software Development Life Cycle
   1. Business Idea
   2. Requirements gathering
   3. Designing and Documenting Phase
   4. Coding or Implementation
   5. Testing
   6. Deployment
   7. Maintenance
2. Php Discussion
3. Remote & Local Environments
4. JavaScript Implementation

**Code Reference:**

// Using 'var'

var a = 10;

if (true) {

var a = 20;

}

console.log(a); // Output: 20

// Using 'let'

let b = 10;

if (true) {

let b = 20;

}

console.log(b); // Output: 10

// Using 'const'

const c = 10;

if (true) {

const c = 20;

}

console.log(c); // Output: 10

// Numbers

const num = 42; // Integer

const floatNum = 3.14; // Floating-point number

// Strings

const str = "Hello, World!"; // String

// Booleans

const isTrue = true; // Boolean true

const isFalse = false; // Boolean false

// Arrays

const arr = [1, 2, 3, 4, 5]; // Array

// Objects

const obj = {

name: "John",

age: 30,

}; // Object

// Functions

function greet(name) {

return `Hello, ${name}!`;

}

// Undefined

let undefinedVar;

// Null

const nullVar = null;

console.log(typeof num); // Output: "number"

console.log(typeof str); // Output: "string"

console.log(typeof isTrue); // Output: "boolean"

console.log(typeof arr); // Output: "object"

console.log(typeof obj); // Output: "object"

console.log(typeof greet); // Output: "function"

console.log(typeof undefinedVar); // Output: "undefined"

console.log(typeof nullVar); // Output: "object" (Note: This is a quirk in JavaScript)