

CIT 140

JavaScript I: JavaScript and the Web

Course Description

In this course, students will code and execute JavaScript programs. JavaScript can be used to create dynamic behavior in elements of a Web page. Programs involve controlling the behavior of forms, buttons, and text elements, and can be used to write special-purpose calculators or create forms whose fields have built-in error checking. Prerequisites: CIT 150; or consent of instructor.

Course Competencies

Upon successful completion of this course, the student can:

1. Demonstrate basic JavaScript variable types.
2. Demonstrate JavaScript assignment statements.
3. Demonstrate the input and output processes in JavaScript.
4. Demonstrate arithmetic, string, and logical operations.
5. Demonstrate JavaScript control structures.
6. Demonstrate JavaScript loop constructs.
7. Demonstrate pattern matching using JavaScript.
8. Demonstrate the relationship between JavaScript and Java.
9. Demonstrate JavaScript objects.
10. Demonstrate the ability to write JavaScript applications scripts.

Course Outline

- I. Introduction and JavaScript Fundamentals
 - A. Introduction to JavaScript
 - B. Simple JavaScript Examples
 - C. Basics of the Language
 - D. Expressions
 - E. Operators
 - F. Control Flow Statements
- II. The JavaScript Object Model
 - A. Introduction to Objects
 - B. Properties
 - C. Methods
 - D. Creating Objects
 - E. Using Arrays
 - F. Built-in Objects
 - G. JavaScript Forms
 - H. Introduction to Forms
 - I. Event Processing
 - J. The Form Object
 - K. Form Elements

- L. Form Processing
- M. Navigator Objects
- III. Introduction to Navigator Objects
 - A. The Window Object
 - B. The Document Object
 - C. The Location Object
 - D. The History Object
 - E. The Navigator Object
 - F. JavaScript Page Layout Introduction
 - G. Using Colors
 - H. Links
 - I. Anchors
 - J. JavaScript Frames
 - K. Introduction to Frames
 - L. The Frame Object
 - M. Frame Interaction
 - N. Integration with Java
 - O. HTTP Cookies