## Jeffrey's JavaScript Handout

- History
  - When Created: 1995
  - Who Creator: Brenden Eich
  - Where: Netscape
  - Standard for the web: Ecmascript
- Design Goals
  - Client-Side Scripting
  - Create dynamic HTML
  - Reasons for prospering
    - o The fail of Java Applets for computation upon HTML
    - o Dominant scripting language of internet browsers
- Syntax
  - Described in ECMAScript using Context-Free Grammar
  - Case-sensitive
- Data Types
  - Dynamic Typing
  - Simple Types
    - o Number
    - String
    - o Boolean
    - Undefined
    - $\circ$  Null
  - Complex Types
    - Object
      - No ordinal-types such as enumeration
      - Arrays
        - Supports Associative
- Data Structures
  - JSON
  - Soon to come with ECMAScript 6 Classes
- Data Abstractions
  - JSON
  - •
- Conditionals
  - if-else

- if-elif
- while
- do-while
- for
- switch
- case
- Subprograms
  - functions
- Parameter Passing
- Concurrency
  - Yes
  - Frameworks that implement this
    - $\circ$  AJAX
    - Web Workers
- Recursion
  - Fully supported
- Exception Handling
  - Try/Catch
- Expressions and Assignment Statements
  - •
- I/O
- Unusual Features
  - LISP functions
- Contributions to the Programming Language Landscape
  - Pragmatic approach to form validation

Have a nice day!