**CIT 261 – Week 09 Notes**

Regular Expressions

* Describe patterns in string data
* Type of object
* Can be written
  + let re1 = new RegExp(“abc”);
  + let re2 = /abc/;
* The backslash (\) is used if special characters are needed.

Methods in Regular Expressions

Testing for Matches

* test - Returns a boolean based on whether or not the string contains a match of the pattern in the expression.

console.log(/abc/.test("abcde"));

// -> true

console.log(/abc/.test("abxde"));

// -> false

* match a date and time format like 01-30-2003 15:20

let dateTime = /\d\d-\d\d-\d\d\d\d \d\d:\d\d/;

console.log(dateTime.test("01-30-2003 15:20"));

// -> true

console.log(dateTime.test("30-jan-2003 15:20"));

// -> false

* invert a set of characters by placing a caret (^) inside the first bracket

let notBinary = /[^01]/;

console.log(notBinary.test("1100100010100110"););

// -> false

console.log(notBinary.test("1100100010200110"););

// -> true

Sets of Characters

Within square brackets, a hyphen between numbers is used for a range.

[1-6] = 1 thru 6

Built in common character groups shortcuts

\d Any digit character [0-9]

\w An alphanumeric character ("word character")

\s Any whitespace character (space, tab, newline, and similar)

\D A character that is not a digit

\W A nonalphanumeric character

\S A nonwhitespace character

. Any character except for newline

Timestamps

Begin at the beginning on 1970, in the UTC time zone. They are in miliseconds.

The Document Object Module (DOM)

This is the representation of the HTML tags, text, and other items in the data structure.

Changing the DOM

Almost everything about the DOM data structure can be changed.

Positioning and Animating

Positioning (rotation) goes clockwise, not counterclockwise (normal trig goes clockwise)

Questions for Weekly Call:

1.