[Assignment: Regular Expressions in Javascript and JQuery](https://dmacc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_2938500_1&course_id=_58028_1&group_id=&mode=view)

All information taken directly from W3Schools and Sitepoint.com.

1. What commands in Javascript are used to process Regular Expressions?  Please list the commands and describe their functionality.

The **exec()** method executes a search for a match in a specified string. Returns a result array, or [null](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/null).

The **test()** method executes a search for a match between a regular expression and a specified string. Returns true or false.

1. What commands in JQuery are used to process Regular Expressions?  Please list the commans and describe their functionality.

//select integers only

var intRegex = /[0-9 -()+]+$/;

//match any ip address

var ipRegex = 'bd{1,3}.d{1,3}.d{1,3}.d{1,3}b';

//match number in range 0-255

var num0to255Regex = '^([01][0-9][0-9]|2[0-4][0-9]|25[0-5])$';

//match number in range 0-999

var num0to999Regex = '^([0-9]|[1-9][0-9]|[1-9][0-9][0-9])$';

//match ints and floats/decimals

var floatRegex = '[-+]?([0-9]\*.[0-9]+|[0-9]+)';

//Match Any number from 1 to 50 inclusive

var number1to50Regex = /(^[1-9]{1}$|^[1-4]{1}[0-9]{1}$|^50$)/gm;

//match email address

var emailRegex = '^[A-Z0-9.\_%+-]+@[A-Z0-9.-]+.[A-Z]{2,4}$';

//match credit card numbers

var creditCardRegex = '^(?:4[0-9]{12}(?:[0-9]{3})?|5[1-5][0-9]{14}|6(?:011|5[0-9][0-9])[0-9]{12}|3[47][0-9]{13}|3(?:0[0-5]|[68][0-9])[0-9]{11}|(?:2131|1800|35d{3})d{11})$';

//match username

var usernameRegex = '/^[a-z0-9\_-]{3,16}$/';

//match password

var passwordRegex = '/^[a-z0-9\_-]{6,18}$/';

//Match 8 to 15 character string with at least one upper case letter, one lower case letter, and one digit (useful for passwords).

var passwordStrengthRegex = /((?=.\*d)(?=.\*[a-z])(?=.\*[A-Z]).{8,15})/gm;

//match elements that could contain a phone number

var phoneNumber = /[0-9-()+]{3,20}/;

//MatchDate (e.g. 21/3/2006)

var dateRegex = /(d{1,2}/d{1,2}/d{4})/gm;

//match date in format MM/DD/YYYY

var dateMMDDYYYRegex = '^(0[1-9]|1[012])[- /.](0[1-9]|[12][0-9]|3[01])[- /.](19|20)dd$';

//match date in format DD/MM/YYYY

var dateDDMMYYYRegex = '^(0[1-9]|[12][0-9]|3[01])[- /.](0[1-9]|1[012])[- /.](19|20)dd$';

//match a url

var urlRegex = '/^(https?://)?([da-z.-]+).([a-z.]{2,6})([/w .-]\*)\*/?$/';

//match a url slug (letters/numbers/hypens)

var urlslugRegex = '/^[a-z0-9-]+$/';

//match a url string (Fixes spaces and querystrings)

var urlRegex = /(https?://)?([da-z.-]+).([a-z.]{2,6})([/w.-=?]\*)\*/?/

//select vowels only

var vowelRegex = /^[aeiou]/;

//select whitespace

var whiteSpaceRegex = '^[ t]+';

//select whitespace and tabs

var whiteSpaceRegex = '^[ t]+|[ t]+$';

//select whitespace and linebreaks

var whiteSpaceRegex = '[ trn]';

//replace newline characters with tags

newLineToBr = function(str) { return str.replace(/(rn|[rn])/g, ''); }

//match domain name (with HTTP)

var domainRegex = /(.\*?)[^w{3}.]([a-zA-Z0-9]([a-zA-Z0-9-]{0,65}[a-zA-Z0-9])?.)+[a-zA-Z]{2,6}/igm;

//match domain name (www. only)

var domainRegex = /[^w{3}.]([a-zA-Z0-9]([a-zA-Z0-9-]{0,65}[a-zA-Z0-9])?.)+[a-zA-Z]{2,6}/igm;

//match domain name (alternative)

var domainRegex = /(.\*?).(com|net|org|info|coop|int|com.au|co.uk|org.uk|ac.uk|)/igm;

//match sub domains: www, dev, int, stage, int.travel, stage.travel

var subDomainRegex = /(http://|https://)?(www.|dev.)?(int.|stage.)?(travel.)?(.\*)+?/igm;

//Match jpg, gif or png image

var imageRegex = /([^s]+(?=.(jpg|gif|png)).2)/gm;

//match all images

var imgTagsRegex = //ig;

//match just .png images

1. What do they mean when they use the term 'pattern' with Regular Expressions? - Regular expressions are patterns used to match character combinations in strings. JavaScript also has objects. These patterns are used with the exec, test methods