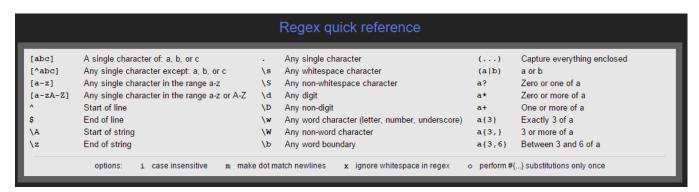
Section 9 Handout

Regular Expression Reference Sheet

The follow table provides an overview of the common pattern options you may use for regex:



On Wednesday's lecture, we will introduce regular expression functions you may use in PHP. We will use these in Thursday's lab. Keep this sheet handy!

PHP Regex Functions

Function	Description
<pre>preg_match(regex, str)</pre>	Returns whether str matches regex
<pre>preg_replace(regex, repl,</pre>	Returns a new string with all substrings of str that match regex re-
str)	placed by repl
<pre>preg_split(regex, str)</pre>	Returns an array of strings from given str split apart using given regex
	as delimiter

Regex Section Problems

Write regex for each of the following:

- (a) UW Student ID numbers (non-negative 7-digit numbers).
- (b) DNA (strings containing only A, C, G, T, ignoring letter-casing).
- (c) camelCased strings containing only letters and at least one capitalized letter (e.g. "superCuteBabyCuttlefish" or "toString" but not "tostring" or "bookData23").
- (d) A 16-digit credit card number, with optional dashes for every 4 numbers (e.g. 1234-1234-1234-1234 or 123412341234).

(e)	A version of "Google" with an odd-number of o's.
(f)	A https URL ending with "edu", "com", "org", or "gov" (e.g. "https://www.cs.washington.edu").
(g)	A real number such as 3.14 or -42.8775.
(h)	Dollar amounts of at least \$100.00.
(i)	Strings that contain at least two consecutive vowels (e.g. "foo", "queue", "QUERY", but not "bar", "panini", "Rhythm").
(j)	Strings that contain only consonants (e.g. "sky", "PHP", "SQL", "rhythm" but not "panini", "vowel", "foo").
(k)	Strings that contain "cat" or "dog" but not both (ignoring letter-casing).
(1)	Digimon names: strings starting with a capital letter and ending in "mon", ignoring casing (e.g. "Agumon", "Gabumon", "MON", but not "Agu" or "Montana").
(m)	Binary strings with at least one 1 and at most two 0's.
(n)	A capitalized first name, single (upper-case) middle initial, and last name with spaces between each and with the first and last name both having lengths fewer than 10 letters.