**Exercise #3**

CSCI 214: Server-Side Admin and Programming

*Overview*

Now that we’ve got some tools in the toolbox, let’s try to make an actual program that does something for us: the Pig Latinator.

*Objectives*

1. Let's build a Pig Latin translator! Here's my general algorithm to turn something into Pig Latin:

1) Find index of first vowel.

2) Create pig latin by concatenating following three things.

a) Substring after starting with the first vowel till end.

b) Substring before first vowel.

c) "ay".

Here's some of the parts and pieces I'd recommend having around:

* An array variable with vowels in it.
* A function you make up returning a Boolean to tell if a letter is a vowel or not.
* Some familiarity with PHP string functions. Here's a good reference: <https://www.php.net/manual/en/ref.strings.php> - I can think of 5 or six ways to get to our algorithm… if you get stuck, tell me your plan in English and I'll point you to some helpful functions 🤓
* A function you make up that takes a word and returns the pig latin equivalent.
* A function you make up that takes a sentence, and using the previous function returns the entire sentence with each word turned into pig latin.
1. Turn your home page form element from a text field to a textarea… something where a user can enter as more text, like a sentence.
2. Take whatever the user entered into your textarea form item, turn it into pig latin, and print it out on the screen.

Question for you: can you make a function to reverse translate? Turn a pig latin word into English? Why or why not?

*Resources*

Here's some links that may come in handy:

<https://www.php.net/manual/en/ref.strings.php> - PHP string function reference

<https://www.geeksforgeeks.org/encoding-word-pig-latin/> - Article about encoding in Pig Latin, with code examples for a few programming languages.

*Completion*

Once you are done with this assignment, hand in a link to your home page so I can try out your Pig Latinator. Hand it in at D2L > Assignments > Exercise 3.