# https://encrypted-tbn3.google.com/images?q=tbn:ANd9GcTLAZpQzmzAPnXtyNCq1onsRE4y0bvoWlMvd3YA8Lt715oLXEJxWAIT 5443 Web Technologies Study Guide **Module 8: Web Server side Processing**

# Prepared by Jack G. Zheng, Last Updated by Zhigang Li

## Overview and learning outcomes

In this module we start some server side programming for the web. PHP is a popular server side programming language for web applications. We will have some basic practice here to help you understand server side programming and basic PHP syntax.

1. Describe the role and basics of web server and server side processing.
2. Compare client-side and server-side processing and scripting (JavaScript vs. PHP).
3. Apply basic language elements of PHP:
   1. Script structure and position in a HTML page
   2. Statements and expressions
   3. Variables, data types
   4. Operators
   5. Control flow: if, switch, for, while
   6. Array
4. Develop simple PHP web applications involving the following elements:
   1. Dynamically generate simple client-side content (HTML/CSS/JavaScript)
   2. Include common webpage components in web pages.

This module is related to course level learning outcomes 2 and 3.

## Task list

1. Read the lecture notes! Especially the part on “**PHP Debugging on Azure**”.
2. Follow the core online learning materials listed in learning materials to learn and practice PHP.
3. Review and research:
   1. JavaScript and PHP both can be used to generate dynamic content. What’s the difference? Which one should you choose to use? Summarize and describe some scenarios.
4. Lab exercise: follow the lab guide (no submission; practice until you feel comfortable and confident to complete the project)
5. Self-assessment: <https://www.w3schools.com/php/php_quiz.asp> - complete this quiz for yourself.

## Learning materials

1. Core online learning materials.
   1. Basics Of Server Side Programming (also a review of some content in module 1):
      1. <https://developer.mozilla.org/en-US/docs/Learn/Server-side/First_steps/Introduction>
      2. <https://www.youtube.com/watch?v=nhZMH8oX6xI>
   2. <http://www.w3schools.com/php/> - w3schools tutorials are simple, concise, and direct to the point, with plenty of live exercises. Read the following sections (menu on the left). Follow the tutorial and complete the hands-on examples (“Try it yourself”) as your read these webpages.
      1. PHP Tutorial: “PHP Home” to “PHP Arrays”
      2. PHP Include: <http://www.w3schools.com/php/php_includes.asp>
2. Lecture notes: php-server.pdf
3. “php examples and lab.zip”
   1. PHP lab: “lab8 php.docx” guide and associated files.
   2. Examples “php examples” provided by the instructor.
4. References and examples
   1. PHP official site: <http://www.php.net>
   2. W3schools: <http://www.w3schools.com/php/php_examples.asp>
5. Additional readings and resources
   1. <https://hackernoon.com/what-is-the-future-of-php-d8d217624eea>
   2. <http://html.net/tutorials/php/>
   3. <http://itwebtutorials.mga.edu/php/> chapter 1 to 6
   4. <http://www.slideshare.net/vineetkumarsaini/php-tutorials-for-beginners>