Requirements for the PHP Lab:

Prerequisites: This is a self-study lab, and there will be no lecture during the workshop. Everything you need is explained in the lab manual. But if you are new to PHP and web development concepts, it is highly advisable to attend my "Connecting the Dots" presentation on Wednesday at 3pm. This gives a solid overview of the concepts and language elements that will be put into action during this workshop.

Note: You will have about 2 hours and 20 minutes to work on this lab. This is part of a 4-part series of progressive exercises, which is intended for either a full-day or half-day workshop. You should be able to complete 1 or 2 of the labs in the time available. Anything you don't finish can be completed back at your office using your own IBMi running Zend Server. You can bring a thumb drive to save your materials where you left off.

System Requirements

Client: Zend Studio is the IDE used for this class, and should be installed on all PCs before class begins. See instructions below. You can use any PHP-aware editor, as long as it can connect to a remote server using SFTP. But I may not be able as familiar as I am with Zend Studio in case you get stuck.

Server: You will be connecting to an IBM i provided for you with all lab materials pre-installed. All PHP code you write in Zend Studio will be stored and executed on the IFS of this server. You will not be connecting to your company's IBM i during this lab, but source code you work on can be downloaded to a thumb drive (that you supply) for your reference and further work.

Zend Studio: Zend Studio provides the editor where you will develop your PHP code for this workshop. I recommend downloading the latest Zend Studio, from http://www.zend.com/en/products/studio/downloads. Choose the OS that runs on your laptop (Windows/Mac/Linux) and click the Download button. If you already have an older version of Zend Studio installed on your laptop, it should be fine, but I recommend version 10 or higher. Please see the release notes for the version of Zend Studio you are using for specific system requirements.

Browser: Any major browser will be fine, but I recommend using the latest version of whichever one you choose. I also recommend Google Chrome for development work.

LAB / Workshop: Build a PHP Application From Scratch

Created by John Valance

In this workshop, students will build a PHP inquiry application from scratch, and at the end of the day have a working application similar to an RPG subfile, running in a web browser. This is normally a day-long workshop. But it can also be done as an abbreviated, half-day workshop, which only covers half the material.

This workshop will guide you through building all the components piece by piece, starting with basic database retrieval using PHP and SQL, then formatting the data in an HTML table, as well as adding search filters and CSS styling. You will then add pagination logic (to scroll through a large file), and we'll end with adding a CSV download option.

The following topics will be covered:

- PHP and DB2 processing with SQL
- HTML including tables and form inputs

- Basic CSS
- Pagination concepts and coding
- Adding search filters
- Handling downloads
- Application architecture

This session will be largely hands-on, but John will do brief explanations of each step before moving forward. No prior PHP or HTML experience is required, but the material will move quickly, so a basic familiarity with PHP and HTML will be helpful. If you fall behind, there will be several checkpoints along the way, where the completed code from the previous step will be provided, in order for you to catch up and focus on the next step. You will be able to take home the completed application code, as provided by the instructor.