



UNIVERSITY
OF THE PEOPLE

CS-3305

Web Programming 2

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Learning Journal Unit 3
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This week has been incredibly engaging as I delved deep into PHP and server-side programming. The journey through Unit 3 has opened my eyes to the vast possibilities of web development, particularly in understanding how popular platforms like WordPress and Facebook leverage PHP's capabilities.

During the discussion forum, I shared insights about PHP's dominance in web development, citing its impressive 77.4% usage across websites with known server-side programming languages. It was fascinating to learn how Facebook, despite its evolution, still maintains PHP components in its architecture. The discussion with my peers about WordPress powering 43% of all websites really put into perspective just how crucial PHP is in today's web landscape.

The programming assignment challenged me to think differently about server-side operations. Working through intermediate PHP concepts, I found myself particularly intrigued by modern features like Laravel and Symfony frameworks. The hands-on experience with object-oriented programming in PHP, especially working with traits and namespaces, helped solidify my understanding of code organization principles.

One of the most challenging aspects this week was wrapping my head around asynchronous programming through ReactPHP. While initially overwhelming, the breakthrough moment came during a group discussion where we explored real-world applications of concurrent connections. This concept finally clicked when I related it to handling multiple user requests simultaneously on a web server.

The self-quiz highlighted some knowledge gaps, particularly around PHP's security features. This prompted me to dive deeper into cross-site scripting (XSS) prevention and SQL injection protection. The learning journal entries helped track this progress, and I found myself particularly proud when successfully implementing secure password hashing in one of the practice exercises.

What surprised me most was discovering PHP's evolution in database integration. The PDO extension's versatility in handling multiple database systems weren't something I had anticipated, and it's exciting to think about the possibilities this opens for future projects.

The peer assessment of Unit 2's programming assignments provided valuable perspective. Reviewing others' code approaches helped me recognize alternative solutions I hadn't considered.

Looking back, I realize I'm gaining not just technical skills but also a deeper appreciation for the architectural decisions behind large-scale web applications. The learning journal has become an invaluable tool for tracking these realizations and documenting my growth as a developer.

The graded quiz served as a comprehensive check on my understanding, particularly testing my knowledge of PHP's advanced features like JIT compilation and web service integration. While challenging, it helped reinforce the week's learning objectives about server-side programming's value and PHP's intermediate concepts.

Moving forward, I'm excited to apply these new insights, especially in working with RESTful APIs and middleware systems. The combination of theoretical knowledge from

readings and practical application through assignments has created a solid foundation for tackling more complex web development challenges.

This unit has truly transformed my perspective on server-side programming, making me appreciate both its complexity and elegance in modern web development.

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