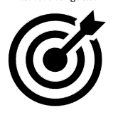
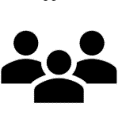
**LSPU Self-paced Learning Module (SLM)**

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| **Course** | **Bachelor of Science in Information Technology** |
| **Sem/AY** | **First Semester/2022-2023** |
| **Module No.** | **4** |
| **Lesson Title** | **WEB BROWSER & INTRODUCTION TO PHP** |
| **Week Duration** | **2** |
| **Date** |  |
| **Description of the Lesson** | This course covers the theoretical foundations and practical applications of client-server systems, a popular type of distributed system in which software is divided into server and client duties. Client-server application development for database systems is covered in-depth in this course. With a focus on middleware, systems planning, and data access, both central and distributed server models will be examined. |

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**Learning Outcomes**

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| **Intended Learning Outcomes** | The following targeted learning outcomes should be accomplished by students:   * Understand the importance of a web browser. * Show how to use both a web browser and PHP. * Determine how the web browser connects to PHP and the webpage. * List the advantages and disadvantages of using PHP. |
| **Targets/ Objectives** | At the end of the lesson, students should be able to:   * To understand PHP's usefulness in creating dynamic websites and its significance. * To evaluate the proper application of various browsers. * To explain the advantages and disadvantages of using PHP. |

 **Student Learning Strategies**

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| **Online Activities (Synchronous/**  **Asynchronous)** | 1. **Online Discussion via Google Meet**   You will be required to attend a two-hour lecture on the nature of educational technologies and a three-hour lab on those same topics. Please click on the following link to access the online discussion:  The online discussion will take place between 8:00 and 10:00AM on September 27 and October 4, 2022.  (For further instructions, refer to your Google Classroom and see the schedule of activities for this module)   1. **Learning Guide Questions:** 2. What non-projected materials are available for use in the teaching and learning process? 3. What are the benefits and drawbacks of using these non-projected materials? 4. How these non-projected materials can enhance the effectiveness of teaching process?   ***Note:*** *The insight that you will post on online discussion forum using Learning Management System (LMS) will receive additional scores in class participation.* |
| **Offline Activities**  **(e-Learning/Self-Paced)** | **Lecture Guide**  **Web Browser**  **What is Web Browser?**  **Web Browser**   * A program for using the World Wide Web to access information. * A program for visiting and viewing websites. * Rendering HTML, the code used to create or "markup" webpages is the main responsibility of a web browser. * It processes HTML, which may contain text, links, and references to images as well as other things like cascading style sheets and JavaScript functions.   **Advantages of Web Browser**   * Supporting different HTML formats (such as XHTML and HTML 5), dynamic JavaScript, and encryption used by secure websites. * Give web designers the freedom to construct websites that are very interactive. * Dynamically update content on a website without requiring a page reload. * Present responsive website layouts with a variety of graphic effects.   **Disadvantages of Web Browser**   * Problems with browser compatibility still exist. * The appearance of websites may differ between browsers. * A webpage could run smoothly in one browser but improperly in another.     **Types of Web Browser**    **Google Chrome**   * In 2008, Google made it available. * Currently, the most widely used web browser is this one.     **Mozilla Firefox**   * Adapted from Mozilla, Firefox is a new browser. * Debuted in 2004 and has become the second most used browser on the Internet. * A free and open-source web browser that may be used with Linux and other operating systems as well as Windows.   **Internet Explorer**   * Internet ExplorerInternet ExplorerA software creation by the industry leader Microsoft. * Included in the Windows operating system program. * The universe's most widely used browser. * Launched in 1995 at the release of Windows 95, it surpassed Netscape in popularity in 1998**.**   **Opera**   * **Internet ExplorerOpera Browser**Despite being fully functional, it is smaller and faster than the majority of other browsers. * Ideal as a front-end for CD-Rom and kiosks, as well as for schoolchildren, handicapped people, and Internet novices. * A web browser with free apps for mobile phones and personal PCs that are tied to the internet.     **Safari**   * **Safari Browser**An internet browser created by Apple Inc. that comes with Mac OS X. * A web browser created by Apple, Inc. for the iPhone, iPod Touch, Mac OS, Windows XP, and Vista operating systems. * Formally launched in January 2003 as a public beta. * Excellent support for modern technologies like CSS2, XHTML, etc.   **Introduction to Hypertext Preprocessor (PHP)**  **What is PHP?**  **Hypertext Preprocessor (PHP)**   * A general-purpose programming language that is especially well suited to web development thanks to the integration of HTML, CSS, and JavaScript, the languages that are used to create websites. * First developed in 1994 by Danish-Canadian programmer Rasmus Lerdorf. * Originally stood for Personal Home Page, but it is now used to refer to PHP: Hypertext Preprocessor, a recursive acronym. * A PHP interpreter, which can be implemented as a module, daemon, or Common Gateway Interface (CGI) executable, typically processes PHP code on a web server. * In addition to web development, PHP may also be used to create standalone graphical programs and control robotic drones. * The PHP language evolved until 2014 without a formal published specification or standard. * Over a third of all websites use version 5.6 or older of the PHP programming language, which is no longer supported by The PHP Development Team. * Over half of websites using PHP are still using deprecated versions as of July 2020. * On November 30, 2020, PHP 7.2 will stop receiving security updates. If websites aren't upgraded to version 7.3 by that point, 70% of PHP websites will be using deprecated versions.   **Advantages of PHP**   * **Open source:**It is developed and maintained by a large group of developers. This will help in creating a support community and abundant extension libraries. * **Speed:**It is relatively fast, since it uses not much system resources. * **Easy to use:** It uses a C like syntax, so for those who are familiar with C, it’s very easy for them to pick up and easy to create website scripts. * **Stable:** Since it is maintained by many developers, bugs are rather found and fixed quickly, making it stable software. * **Powerful library support:** You can easily find functional modules you need such a PDF, graph etc. * **Built in database connection modules:** You can connect to databases easily using PHP, since many websites are data/ content driven, so we will use database frequently, this will largely reduce the development time of web apps.   **Disadvantages of PHP**   * **Security:**Since it is open sourced, all people can see the source code. If there are bugs in the source code, it can be used by people to explore the weakness of it. * **Not suitable of large applications:** It will be difficult to use it for programming huge applications. Since the programming language is not highly modular, huge applications created out of the programming language will be difficult to maintain. * **Weak type:** Implicit conversion may surprise unwary programmers and lead to unexpected bugs. Confusion between arrays and hash tables. This is slow and could be faster. There are often a few ways to accomplish a task. It is not strongly typed. It is interpreted and uses curly braces. * **Poor Error Handling Method:** The framework has a bad error handling method. It is not a proper solution for the developers. Therefore, as a qualified PHP developer, you will have to overcome it. * **PHP is unable to handle large number of apps:** The technology is helpless to support a bunch of apps. It is highly tough to manage because, it is not competent modular. It already imitates the features of Java language.   **Uses of PHP**   * It is used to create dynamic website. * To interact with web server (Apache etc) * To interact with any back-end / database server e.g. MySQL * To interact with the native file system of the OS * To implement the business logical layers (one or more) * It can Encrypt Data * Access cookies variable and set cookies * Using php you can restrict user to access specific web page * PHP usually used to output HTML code to the browser * Used for connect web application with Database * It is used for send and receives E-Mails. * You can use PHP to find today's date, and then build a calendar for the month. * If you host banner advertisements on your website, you can use PHP to rotate them randomly. * Using php you can count your visitors on your website. * You can use PHP to create a special area of your website for members. * Using php you can create login page for your user. * Using php you can add, delete, and modify elements within your database thru PHP. * PHP performs system functions, i.e. from files on a system it can create, open, read, write, and close them. * It can handle forms, i.e. gather data from files, save data to a file.   **Engaging Activities**  **Actual Activities for Students**  The students must choose which web browser is the best and most compatible with their output as they build a simple static website to analyse how it aids in website development. The outcomes of their effort must be discussed. |

**** **Performance Tasks**

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| **NAME:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **YR/SEC:** \_\_\_\_\_\_\_\_\_\_\_  **DATE OF SUBMISSION:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **SCORE:** \_\_\_\_\_\_\_\_\_\_\_   1. **Fill in the blanks: Write your answer in the space provided.**   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Who created PHP?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_2. In what year that PHP develop?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_3. It is small but faster than other browser.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_4. It is a [software application](https://en.wikipedia.org/wiki/Software_application) for accessing information on the [World Wide Web](https://en.wikipedia.org/wiki/World_Wide_Web).  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_5. It is usually processed on a [web server](https://en.wikipedia.org/wiki/Web_server).   1. **Enumeration: Write your answer in the space provided.**     1. **Advantages of PHP (5)**   1.  2.  3.  4.  5.   * 1. **Disadvantages of PHP (5)**   1.  2  3.  4.  5.   * 1. **Uses of PHP (5)**   1.  2  3.  4.  5.   1. **Essay: Write your answer in the space provided. (5points)** 2. **What is the purpose of using PHP in developing Dynamic Website?**   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |



**Understanding Directed Assess**

***Rubric for Designing Lesson Plan (PT 2)***

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| **CRITERIA** | | | | | |
|  | **4** | **3** | **2** | **1** | **Points** |
| **Content** | All information provided by the student on the web site is accurate and all the requirements of the assignment have been met. In other words, there is sufficient content in this website to learn about the topic and complete a research assignment. | Almost all the information provided by the student on the web site is accurate and all requirements of the assignment have been met. Or all the information is accurate but not all of the requirements of the assignment were met. Information is not complete. | Almost all of the information provided by the student on the web site is accurate and almost all of the requirements have been met. If there is little information on the website, then it is satisfactory. If researchers cannot find what they need on your website, it is satisfactory. | There are several inaccuracies in the content provided by the students OR many of the requirements were not met. Not enough content, very incomplete. |  |
| **Learning of Material** | The student has an exceptional understanding of the material included in the site and where to find additional information. Can easily answer questions about the content and procedures used to make the web site. | The student has a good understanding of the material included in the site. Can easily answer questions about the content and procedures used to make the web site. | The student has a fair understanding of the material included in the site. Can easily answer most questions about the content and procedures used to make the web site. | Student did not appear to learn much from this project. Cannot answer most questions about the content and the procedures used to make the web site. |  |
| **Links (content)** | All links point to high quality, up-to-date, credible sites in the bibliography. AND all the links, including links to their own pages, work. | Almost all links point to high quality, up-to-date, credible sites in the bibliography. Or there aren't many links. AND many or most of the links, including links to their own pages, work. | Most links point to high quality, up-to-date, credible sites in the bibliography. Or there are too few links. AND some of the links, including links to their own pages, work. | Less than 1/2 of the links point to high quality, up-to-date, credible sites in the bibliography. Or there are barely any links. AND few of the links, including links to their own pages, work or you have very few pages. |  |
| **Graphics** | Graphics are related to the theme/purpose of the site, are thoughtfully cropped, are of high quality and enhance reader interest or understanding. There are no broken images. | Graphics are related to the theme/purpose of the site, are of good quality and enhance reader interest or understanding. There are no broken images. | Graphics are related to the theme/purpose of the site, and are of good quality. There may be a few broken images. | Graphics seem randomly chosen, are of low quality, OR distract the reader. Many images are broken. |  |
| **Layout and composition** | The web site has an exceptionally attractive and usable layout. It is easy to locate all important elements. White space, graphic elements and/or alignment are used effectively to organize material. | The web pages have an attractive and usable layout. It is easy to locate all important elements. | The web pages have a usable layout, but may appear busy or boring. It is easy to locate most of the important elements. | The web pages are cluttered looking or confusing. It is often difficult to locate important elements. |  |
| **Navigation** | Links for navigation are clearly labeled, consistently placed, allow the reader to easily move from a page to related pages (forward and back), and take the reader where s/he expects to go. A user does not become lost. | Links for navigation are clearly labeled, allow the reader to easily move from a page to related pages (forward and back), and internal links take the reader where s/he expects to go. A user rarely becomes lost. | Links for navigation take the reader where s/he expects to go, but some needed links seem to be missing. A user sometimes gets lost. | Some links do not take the reader to the sites described. A user typically feels lost. |  |
| **Cooperative Work** | Partners show respect for one another's ideas, divide the work fairly, and show a commitment to quality work and support for each other. | Partners show respect for one another's ideas and divide the work fairly. There is commitment by some members toward quality work and support of one another. There may have been a few arguments but they were handled well. | Partners show respect for one another's ideas and divide the work fairly. There is little evidence of a commitment toward quality work in the group or there were some arguments. | Partners argue or are disrespectful of other's ideas and input. Criticism is not constructive nor is support offered. The work is mostly done by one or two people. |  |
| **Total---------->** | | | | |  |



**Learning Resources**

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| **Website:**   * [www.tutorialspoint.com](http://www.tutorialspoint.com) * [www.wikipedia.org](http://www.w3schools.com) * [www.geeksforgeeks.org](http://www.geeksforgeeks.org) |