CS3305 Learning Journal

**A guide for writing a “reflective journal:”**

**Who will read the journal?**

The contents of your journal will be only visible to the instructor.  Unlike discussion forums or blogs, the journal is an area for reflection without a wide audience.

**Why do it?**

Maintaining a journal serves several purposes:

1. A means of communication, conversation (e.g., between material and yourself, yourself and instructors).

2. Provides regular feedback between you and the instructors and helps to match expectations.

3. Platform for synthesis of knowledge and ideas

4. Help develop critical thinking

5. Helps to elicit topics of interest, challenging topics that need improvement, etc.

**What to write?**

First write a brief summary of the contents of a lecture, lab activity, group discussion or reading material. Then reflect upon these activities. Record your own thoughts, ideas, responses and reactions to any of the above activities. Make notes about concepts, questions you have, and any confusion that may arise. Use the journal to explore possible solutions to problems being raised in class or alternative activities to the ones presented in class. Record new insights and problem solving strategies realized during discussions with fellow students and instructors. The journal reflects your own thoughts and ideas. Be as original and critical (constructive) as you can.

Some additional ideas:

Describe any feedback you received or any specific interactions you had.

Discuss how they were helpful Describe your feelings and attitudes What surprised me or caused me to wonder?

What happened that felt particularly challenging? Why was it challenging to me?

What skills and knowledge do I recognize that I am gaining?

What am I realizing about myself as a learner?

In what ways am I able to apply the ideas and concepts gained to my own experience?

**What not to do:**

Do not copy and paste any material from the discussion forum, your own assignment, or any other source.  The entries in the journal must be your own words.

**When do I use the journal?**

You are expected to use the journal for each week of the course.

**How will it be graded?**

Each weekly journal must be at least 500 words long.  Please use proper grammar and keep your writing on the class topic.  Deductions from a full credit on this assignment would be taken if you copy and paste content.  As long as you write down your own reflection about the learning activities, deductions will not be taken.  You will receive a single grade for each week and the grades will count toward your final grade in the course.

I started my learning with the PHP manual. This is a large document seems to me at first glance. After the browse through the index, I noticed I should use it as a dictionary rather than a tutorial to study.

The topics are divided mainly into the installation of PHP to different systems.

The language features and system variables and built-ins.

the next section is the security which involves the session, file system, database system, error handling, and user-submitted data.

The third major section is the features section, which introduces the special supports for PHP that provides convenience for web development. It includes authentication, cookies, sessions, forms, and uploading. The important part is the garbage collection and dynamic tracing. I believe I should at least relearn them if I handle PHP production issues someday.

The next major section is library support. Many subtopics in this section involve but are not limited to audio, authentication, cryptography, datetime, database, image processing, search engine, text processing, and web services.

Simply speaking, for anything that involves a specific task, we should look into this section to search for related libraries before we start to write our code.

As most of the time, regardless we want to do email, file upload, audio or image, and web service. We can use the functions here.

One topic I felt worth paying attention to is Database extensions.

The database extension is consisting of three layers of DBA – the database Abstraction Layer,

ODBC and PDO – PHP data objects.

Dba functions are including dba operations like open, close, fetch, insert, and handlers.

The ODBC layers allow browsing the semantics of ODBC APIs.

ODBC layer includes functions like getting information from columns and tables.

It can do commits, handle cursors or rollbacks.

PDO layer defines a lightweight, consistent interface for accessing databases in PHP. But we will need a PDO driver for performing PDO relating tasks.

PDO provides more fine-grain operations with database operations.

We can manage transactions, manage commits, getting attributes and rollbacks.

Then I started to work on the discussion assignments, due to the concern of writing for the duplicate topics, I purposely choose some topics relating to authentications as I felt they are commonly involved in many projects.

The JSON functions are commonly discussed. It provides easy-to-use functions.

Json\_decode

Json\_encode

Will simply decode a JSON string or returns a JSON object from JSON data.

After that, I started to work on the written assignment,

I have learned the basic usage of Arrays, Control structures like while loops, break, continue, and some keywords.

Last I learned how to define a function in PHP, which is pretty close to the syntax of JavaScript.

From the discussion assignment, I have got a comprehensive overview of the advanced techniques that can be accomplished using PHP in web development. PHP is indeed a popular scripting language known for its adaptability and extensive functionality.

Overall, through learning the advanced techniques that PHP offers, I have gained more awareness of PHP and its related functions in the development of web services.