Summary 1

Gordon Tian
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Browser – Chrome | FireFox

XML/HTML/CSS3/JavaScript/REST

Web Server – Nginx

PHP/Python/Perl/Java/Ruby/Node.js

Database – MySQL

Cloud – IaaS, PaaS, SaaS

TCP/IP - networking

URL/Socket/IP4 address

Virtualization - VMware

Install Nginx/MySQL/PHP

- WT-NMP

- http://wtriple.com/wtnmp/index.php

- Install Directory:
  c:\cygwin\home\$USER

- Pay attention to directory security
  settings

- Start WT-NMP

- Test it by going to URL localhost or
  127.0.0.1 using Chrome/FireFox

Path

- In start menu, Right click Computer → Properties → Advanced System Settings → Advanced → Environment Variables → System Variables → Path

- After editing the Path system variable, please run cmd (if you are running, you have to kill it and run a new cmd

To confirm you have edited the Path successfully, just type

mysql

in the Cmd

set path

Open Windows Cmd to log into MySQL

Set MySQL root password to svuwins using mysql update

Add a new user svu and set its password svuwins using HeidiSql

Flush Privileges - The FLUSH statement causes the server to reread the grant tables. Without it, the password change remains unnoticed by the server until you restart it.'

Add user by: Grant all on *.* to 'svu'@'localhost' identified by ''

SHOW GTRANTS FOR username@localhost;

MacBook MAMP

1. Install MAMP

2. Open Terminal, type cd to go to home directory

3. add/change .bash_profile file by adding:

 export PATH=/Applications/MAMP/Library/bin:$PATH

4. Save the file

5 run command . .bash_profile

For windows, you have to kill the old cmd terminal and start a new one

For Mac users, you run the command

. .bash_profile

In your home directory

Create/Delete database

mysql -uroot -p

> use mysql;

> UPDATE user set password = password("svuwins") where user = "root";

> CREATE USER 'svu'@'localhost' IDENTIFIED BY 'svuwins';

> GRANT ALL ON proj1.* TO 'svu'@'localhost';

> flush privileges;

> select user, password, host from user;

cp phpMyAdmin*.zip
    /Applications/MAMP/htdocs

unzip phpMy*.zip

Localhost:8888/phpMyAdmin

CRUD - Create Read Update Delete

DO NOT USE SPACES in the names of

databse, table, table element, php
   variables

GRANT ALL ON sep29.* to
   'svu'@'localhost';

Flush privileges;

Create a table

```sql
CREATE TABLE `user` (

`id` int NOT NULL AUTO_INCREMENT PRIMARY KEY,

`fname` varchar(64) NOT NULL,

`mname` varchar(64) NULL,

`lname` varchar(64) NOT NULL,

`studentid` int NOT NULL,

`email` varchar(40) NOT NULL,

`password` varchar(20) NOT NULL,

`gender` tinyint NOT NULL,

`notes` varchar(100) NOT NULL,

`registertime` datetime NOT NULL,

`lastlogintime` datetime NOT NULL,

`registerip` varchar(20) NOT NULL,

`lastloginip` varchar(20) NOT NULL,

`birthdate` varchar(20) NOT NULL

) ENGINE='InnoDB' COLLATE 'utf8_general_ci';
```

Create a table

```sql
CREATE TABLE `department` (

  `id` int unsigned NOT NULL
    AUTO_INCREMENT PRIMARY KEY,

  `did` varchar(10) NOT NULL,

  `department` varchar(30) NOT NULL

) ENGINE='InnoDB';
```

Insert SQL command

INSERT INTO `user` (`fname`, `mname`, `lname`, `email`, `password`, `studentid`, `phone`, `address`, `registertime`, `registerip`, `lastlogintime`, `lastloginip`, `status`)

VALUES ('Gordon', '', 'Tian', '', '', '', '', NULL, '', '', '', '', '1');

HTML <Form> Tag

The <form> tag is used to create an HTML form for user input.

The <form> element can contain one or more of the following form elements:

<input>

<textarea>

<button>

<select>

<option>

<optgroup>

<fieldset>

<label>

PHP Basics

- PHP is a recursive acronym for "PHP: Hypertext Preprocessor".

- PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites.

- It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.

- PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time.

- PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time.

- PHP is forgiving: PHP language tries to be as forgiving as possible.

- PHP Syntax is C-Like.

- PHP is Object Oriented Language

- When the end of a file is reached, PHP automatically releases all resources.

Canonical PHP tags

1. <?php ... ?>

2. <? ... ?>

3. <% ... %>

PHP Expression/Statement

- Case sensitive

- Expressions are combinations of tokens

The smallest building blocks of PHP are the indivisible tokens, such as numbers (3.14159), strings (.two.), variables ($two), constants (TRUE), and the special words that make up the syntax of PHP itself like if, else, while, for and so forth

- Statements are expressions terminated by semicolons

PHP Variables

- All variables in PHP are denoted with a leading dollar sign ($).

- The value of a variable is the value of its most recent assignment.

- Variables are assigned with the = operator, with the variable on the left-hand side and the expression to be evaluated on the right.

- Variables can, but do not need, to be declared before assignment.

- Variables in PHP do not have intrinsic types - a variable does not know in advance whether it will be used to store a number or a string of characters.

- Variables used before they are assigned have default values.

- PHP does a good job of automatically converting types from one to another when necessary.

- PHP variables are Perl-like.

PHP Data Types

- Integers − are whole numbers, without a decimal point, like 4195.

- Doubles − are floating-point numbers, like 3.14159 or 49.1.

- Booleans − have only two possible values either true or false.

- NULL − is a special type that only has one value: NULL.

- Strings − are sequences of characters, like 'PHP supports string operations.'

- Arrays − are named and indexed collections of other values.

- Objects − are instances of programmer-defined classes, which can package up both other kinds of values and functions that are specific to the class.

- Resources − are special variables that hold references to resources external to PHP (such as database connections).