LEVEL 5

DYNAMIC WEBSITES

Code from the Lecturer Guide

Modification History

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Introduction

This document contains all of the code snippets from the Lecturer Guide for Dynamic Websites. This is presented in Word format to allow you to transfer it to other formats as necessary. Please note that the section numbering in this document is the same that in the Lecturer Guide to make it easier to locate the relevant code.

# Introduction to PHP

## Laboratory Sessions

Exercise 1 Suggested Answer:

HTML

<html>

<head>

<title>Dice Form</title>

</head>

<body>

<form action = "dice\_roll.php" method = "post">

<p>How many dice</p>

<input type = "text" name = "num">

<p>How many faces?</p>

<input type = "text" name = "faces">

<input type = "submit" value = "Roll">

<input type = "reset" value = "Clear values">

</body>

</html>

PHP Code

<html>

<head>

<title>Dice Roller</title>

</head>

<body>

<?

$num = $\_POST["num"];

$faces= $\_POST["faces"];

$total = 0;

$roll = 0;

for ($i = 0; $i < $num; $i++) {

$roll = $random = (rand()%$faces) + 1;

echo "<p>Dice roll " . ($i+1) . " is $roll.</p>";

$total += $roll;

}

echo "<p>Total roll is $total</p>"

?>

</body>

</html>

Exercise 2 Suggested Answer:

HTML

<html>

<head>

<title>Reverse Form</title>

</head>

<body>

<form action = "text\_reverse.php" method = "post">

<p>Text to reverse</p>

<input type = "text" name = "text">

<input type = "submit" value = "Reverse">

<input type = "reset" value = "Clear values">

</body>

</html>

PHP Code

<html>

<head>

<title>Text Reverser</title>

</head>

<body>

<?

$text = $\_POST["text"];

$reversed= "";

$text = strtolower ($text);

for ($i = strlen ($text); $i >= 0; $i--) {

$reversed = $reversed . $text[$i];

}

echo "<p>The reversed word is $reversed</p>"

?>

</body>

</html>

Exercise 3 Suggested Answer:

HTML

<html>

<head>

<title>Calculator Form</title>

</head>

<body>

<form action = "calc.php" method = "post">

<p>Number 1</p>

<input type = "text" name = "num1">

<p>Number 2</p>

<input type = "text" name = "num2">

<p>Operation</p>

<select name = "operation">

<option>Add</option>

<option>Subtract</option>

<option>Multiply</option>

<option>Divide</option>

</select>

<input type = "submit" value = "Calculate">

<input type = "reset" value = "Clear values">

</body>

</html>

PHP Code

<html>

<head>

<title>Calculator</title>

</head>

<body>

<?

$num1 = $\_POST["num1"];

$num2 = $\_POST["num2"];

$op = $\_POST["operation"];

$ans = 0;

if ($op === "Add") {

$ans = $num1 + $num2;

}

else if ($op === "Subtract") {

$ans = $num1 - $num2;

}

else if ($op === "Multiply") {

$ans = $num1 \* $num2;

}

else if ($op === "Divide") {

$ans = $num1 / $num2;

}

echo "<p>The answer is $ans.</p>";

?>

</body>

</html>

## Private Study

Exercise 2 Suggested Answer:

<html>

<head>

<title>Calculator</title>

</head>

<body>

<?

$num1 = $\_POST["num1"];

$num2 = $\_POST["num2"];

$op = $\_POST["operation"];

$ans = 0;

if ($op === "Add") {

$ans = $num1 + $num2;

}

else if ($op === "Subtract") {

$ans = $num1 - $num2;

}

else if ($op === "Multiply") {

$ans = $num1 \* $num2;

}

else if ($op === "Divide") {

$ans = $num1 / $num2;

}

else if ($op === "Power") {

$ans = pow ($num1, $num2);

}

else if ($op === "Remainder") {

$ans = $num1 % $num2;

}

echo "<html>";

echo "<head>";

echo "<title>Calculator Form</title>";

echo "</head>";

echo "<body>";

echo "<form action = \"calc.php\" method = \"post\">";

echo "<p>Number 1</p>";

echo "<input type = \"text\" name = \"num1\" value = \"$ans\">";

echo "<p>Number 2</p>";

echo "<input type = \"text\" name = \"num2\">";

echo "<p>Operation</p>";

echo "<select name = \"operation\">";

echo "<option>Add</option>";

echo "<option>Subtract</option>";

echo "<option>Multiply</option>";

echo "<option>Divide</option>";

echo "<option>Power</option>";

echo "<option>Remainder</option>";

echo "</select> ";

echo "<input type = \"submit\" value = \"Calculate\">";

echo "<input type = \"reset\" value = \"Clear values\">";

?>

</body>

</html>

# Cookies and Sessions

## Laboratory Sessions

Exercise 1 Suggested Answer:

HTML

<html>

<head>

<title>Colour Form</title>

</head>

<body>

<form action = "colour\_next\_page.php" method = "POST">

<p>What colour?</p>

<select name = "colour">

<option>Red</option>

<option>Grey</option>

<option>Blue</option>

</select>

<input type = "submit" value = "Let's see those colours">

<input type = "reset" value = "Clear values">

</body>

</html>

PHP 1

<?

$colour = $\_POST["colour"];

setcookie ("colour", $colour, time() + 10000);

?>

<html>

<head>

<title>Colour</title>

</head>

<?

$colour = $\_POST["colour"];

echo "<body bgcolor = \"$colour\">";

?>

<p>It starts here!</p>

<a href = "next\_colour\_1.php">Next!</a>

</body>

</html>

PHP 2

<html>

<head>

<title>Colour</title>

</head>

<?

$colour = $\_COOKIE["colour"];

echo "<body bgcolor = \"" . $colour . "\">";

?>

<p>It keeps going!</p>

<a href = "next\_colour\_2.php">Next!</a>

</body>

</html>

PHP 3

<html>

<head>

<title>Colour</title>

</head>

<?

$colour = $\_COOKIE["colour"];

echo "<body bgcolor = \"$colour\">";

?>

<p>It Ends!</p>

</body>

</html>

Exercise 2 Suggested Answer:

<?

session\_start();

?>

<html>

<head>

<title>Colour</title>

</head>

<?

$\_SESSION["counter"] += 1;

$name = "blah";

if (isset ($\_SESSION["name"])) {

$name = $\_SESSION["name"];

}

else {

$name = $\_POST["name"];

}

$counter = $\_SESSION["counter"];

echo "Hello $name, you have been here $counter times.";

?>

</body>

</html>

Exercise 3 Suggested Answer:

<?

session\_start();

?>

<html>

<head>

<title>List</title>

</head>

<?

$data = $\_GET["data"];

$list = $\_SESSION["list"];

if (!$list) {

$list = array ();

$\_SESSION["list"] = $list;

}

if (!$data) {

echo "<ul>";

for ($i = 0; $i < sizeof ($list); $i++) {

echo "<li>" . $list[$i] . "</li>";

}

echo "</ul>";

}

else {

array\_push ($list, $data);

echo "<p>Data added</p>";

}

$\_SESSION["list"] = $list;

?>

</body>

</html>

## Private Study

Exercise 2 Suggested Answer:

<?

session\_start()

?>

<html>

<head>

<title>Magic Eight Ball</title>

</head>

<body>

<?

$problem = array (

"that you don't know what your problem is",

"that you think a web-page can give you useful advice.",

);

$advice = array (

"stop worrying about it",

"try asking someone smarter than me",

"just get over it",

);

$conclusion = array (

"much better",

"much worse",

"unsatisfied, but my job will have been done",

);

$question = $\_POST["question"];

$answer = $\_SESSION[$question];

if ($answer) {

echo "<p>I already told you - $answer.</p>";

}

else {

$random\_problem = array\_rand ($problem);

$chosen\_problem = $problem[$random\_problem];

$random\_advice = array\_rand ($advice);

$chosen\_advice= $advice[$random\_advice];

$random\_conclusion = array\_rand ($conclusion);

$chosen\_conclusion = $conclusion[$random\_conclusion];

$name = $\_POST["name"];

$answer = "It seems to be that your real problem is $chosen\_problem. My advice is that you " .

"$chosen\_advice. That will make you feel $chosen\_conclusion.";

$\_SESSION[$question] = $answer;

echo "<p>I have an answer for you, $name - $answer</p>";

}

?>

</body>

</html>

# 

# MySQL and PHP

## Laboratory Sessions

Exercise 1 Suggested Answer:

Registration Html Page

<html>

<head>

<title>Example Login</title>

</head>

<body>

<form action = "attempt\_login.php" method = "post">

<p>Username?</p>

<input type = "text" name = "username">

<p>Password</p>

<input type = "text" name = "password">

<input type = "submit" value = "login">

<input type = "reset" value = "Clear values">

</body>

</html>

Registration PHP Script

<html>

<head>

<title>Simple Login</title>

</head>

<body>

<?

$username = $\_POST["username"];

$password= $\_POST["password"];

$email = $\_POST["email"];

$db = mysql\_pconnect ("localhost", "monke13\_nccuser", "ncc1");

mysql\_select\_db ("monke13\_ncc");

$query\_check = "select \* from User where Username=\"$username\"";

$results = mysql\_query ($query\_check, $db);

if (!$results) {

echo "<p>" . mysql\_error() . "</p>";

}

$num\_results = mysql\_num\_rows ($results);

if ($num\_results != 0) {

echo "<p>That username already exists</p>";

echo "<a href = \"example\_login.php\">login</a>";

exit;

}

$query = "insert into User (Username, Password, Email) values (\"$username\"

, \"$password\", \"$email\")";

mysql\_query ($query);

if (!$queryß) {

echo "<p>" . mysql\_error() . "</p>";

}

echo "Registration successful";

echo "<a href = \"example\_login.php\">login</a>";

?>

</body>

</html>

Login HTML Page

<html>

<head>

<title>Example Login</title>

</head>

<body>

<form action = "attempt\_login.php" method = "post">

<p>Username?</p>

<input type = "text" name = "username">

<p>Password</p>

<input type = "text" name = "password">

<input type = "submit" value = "login">

<input type = "reset" value = "Clear values">

</body>

</html>

Login PHP Script

<html>

<head>

<title>Simple Login</title>

</head>

<body>

<?

$username = $\_POST["username"];

$password = $\_POST["password"];

$db = mysql\_pconnect ("localhost", "monke13\_nccuser", "ncc1");

mysql\_select\_db ("monke13\_ncc");

$query = "select \* from User where Username=\"$username\" and Password=\"$password\"";

$results = mysql\_query ($query, $db);

$num\_results = mysql\_num\_rows ($results);

if ($num\_results == 0) {

echo "<p>Invalid login</p>";

echo "<a href = \"example\_registration.php\">Register</a>";

exit;

}

echo "<p>Login successful</p>";

?>

</body>

</html>

## Private Study

Exercise 2

**Suggested Answer:**

<html>

<head>

<title>Simple Login</title>

</head>

<body>

<?

$username = $\_POST["username"];

$password = $\_POST["password"];

$db = mysql\_pconnect ("localhost", "monke13\_nccuser", "ncc1");

mysql\_select\_db ("monke13\_ncc");

$query = "select \* from User where Username=\"$username\"";

$results = mysql\_query ($query, $db);

$num\_results = mysql\_num\_rows ($results);

if ($num\_results > 0) {

$attempts = mysql\_result ($results, 0, "Attempts");

echo "Attempts is $attempts";

$pass = mysql\_result ($results, 0, "Password");

if ($pass == $password) {

$time= mysql\_result ($results, 0, "Timestamp");

if ($attempts >= 4 && $time >time()) {

echo "<p>Invalid login</p>";

echo "<a href = \"example\_login.html\">Try again</a>";

}

else {

$query = "update User set Timestamp=\"0\" where Username = \"$username\"";

mysql\_query ($query, $db) or die (mysql\_error());

$query = "update User set Attempts=\"0\" where Username = \"$username\"";

mysql\_query ($query, $db) or die (mysql\_error());

echo "<p>Login successful</p>";

}

}

else {

$attempts = $attempts + 1;

$time = time() + (60 \* 1);

echo "Attempts is $attempts";

$query = "update User set Attempts=\"$attempts\" where Username = \"$username\"";

mysql\_query ($query, $db) or die (mysql\_error());

$query = "update User set Timestamp=\"$time\" where Username = \"$username\"";

mysql\_query ($query, $db) or die (mysql\_error());

echo "<p>Invalid login</p>";

echo "<a href = \"example\_login.html\">Try again</a>";

}

}

else {

echo "<p>Invalid login</p>";

echo "<a href = \"example\_registration.html\">Register</a>";

}

?>

</body>

</html>

# Web Based Protocols

## Laboratory Sessions

Exercise 1 Suggested Answer:

HTML Code

<html>

<head>

<title>RSS Feed</title>

</head>

<body>

<form action = "rss.php" method = "POST">

<p>First Name</p>

<input type = "text" name = "feed">

<input type = "submit" value = "Get that Feed">

<input type = "reset" value = "Clear values">

</body>

</html>

PHP Code

<?

function contents($parser, $data){

echo $data;

}

function startTag($parser, $data){

echo "&lt; $data &gt;";

}

function endTag($parser, $data){

echo "&lt; $data &gt; <br />";

}

?>

<html>

<head>

<title>RSS PHP</title>

</head>

<body>

<?

$feed = $\_POST["feed"];

$fp = fopen ($feed, "r") or die ("Couldn't open remote file");

$xml\_parser = xml\_parser\_create() or die("Couldn create parser.");

xml\_set\_element\_handler($xml\_parser, "startTag", "endTag");

xml\_set\_character\_data\_handler($xml\_parser, "contents");

while (!feof ($fp)) {

$data = fread($fp, 8192);

$ret = xml\_parse($xml\_parser, $data, feof($fp));

if(!$ret) {

die("Error on line " . xml\_get\_current\_line\_number($xml\_parser));

}

}

xml\_parser\_free($xml\_parser);

fclose ($fp);

?>

</body>

</html>

Exercise 2 Suggested Answer:

<html>

<head>

<title>RSS PHP</title>

</head>

<body>

<?

function contents($parser, $data){

$lastTag = $GLOBALS["lastTag"];

if (!strlen ($data)) {

return;

}

if (!strlen ($lastTag)) {

return;

}

if (isset ($GLOBALS["current story"])) {

$GLOBALS["current story"][$lastTag] = $data;

}

}

function startTag($parser, $data){

if ($data === "ITEM") {

$GLOBALS["current story"] = array();

}

$GLOBALS["lastTag"] = $data;

}

function endTag($parser, $data){

$GLOBALS["lastTag"] = 0;

if ($data === "ITEM") {

array\_push ($GLOBALS["stories"], $GLOBALS["current story"]);

}

}

$feed = $\_POST["feed"];

$fp = fopen ("http://feeds.bbci.co.uk/news/rss.xml", "r") or die ("Couldn't open remote file");

$GLOBALS["stories"] = array();

$xml\_parser = xml\_parser\_create() or die("Couldn create parser.");

xml\_set\_element\_handler($xml\_parser, "startTag", "endTag");

xml\_set\_character\_data\_handler($xml\_parser, "contents");

while (!feof ($fp)) {

$data = fread($fp, 8192);

$ret = xml\_parse($xml\_parser, $data, feof($fp));

if(!$ret) {

die("Error on line " . xml\_get\_current\_line\_number($xml\_parser));

}

}

xml\_parser\_free($xml\_parser);

fclose ($fp);

echo "<p>There are " . sizeof ($GLOBALS["stories"]) . " stories.<p>";

echo "<table>";

echo "<tr>";

echo "<th>Summary</th>";

echo "<th>Link</th>";

echo "</tr>";

for ($i = 0; $i < sizeof ($GLOBALS["stories"]); $i++) {

$current\_story = $GLOBALS["stories"][$i];

echo "<tr>";

echo "<td>" . $current\_story["DESCRIPTION"] . "</td>";

echo "<td><a href=\"" . $current\_story["LINK"] . "\">(Link)</a></td>";

echo "</tr>";

}

echo "</table>";

?>

</body>

</html>

## Private Study

Exercise 2 Suggested Answer:

**XML File**

<?xml version="1.0" encoding="UTF-8"?>

<quotes>

<quote>

<text>Something funny</text>

<author>someone hilarious</author>

</quote>

<quote>

<text>Something wise</text>

<author>someone insightful</author>

</quote>

<quote>

<text>Something thought provoking</text>

<author>someone clever</author>

</quote>

</quotes>

**PHP Code:**

<?

function contents($parser, $data){

$lastTag = $GLOBALS["lastTag"];

if (!strlen ($data)) {

return;

}

if (!strlen ($lastTag)) {

return;

}

if (isset ($GLOBALS["current quote"])) {

$GLOBALS["current quote"][$lastTag] = $data;

}

}

function startTag($parser, $data){

if ($data === "QUOTE") {

$GLOBALS["current quote"] = array();

}

$GLOBALS["lastTag"] = $data;

}

function endTag($parser, $data){

$GLOBALS["lastTag"] = 0;

if ($data === "QUOTE") {

array\_push ($GLOBALS["quotes"], $GLOBALS["current quote"]);

}

}

?>

<html>

<head>

<title>Quote generator</title>

</head>

<body>

<?

$GLOBALS["quotes"] = array();

$fp = fopen ("quotes.xml", "r") or die ("Couldn't open remote file");

$xml\_parser = xml\_parser\_create() or die("Couldn't create parser.");

xml\_set\_element\_handler($xml\_parser, "startTag", "endTag");

xml\_set\_character\_data\_handler($xml\_parser, "contents");

while (!feof ($fp)) {

$data = fread($fp, 8192);

$ret = xml\_parse($xml\_parser, $data, feof($fp));

if(!$ret) {

die("Error on line " . xml\_get\_current\_line\_number($xml\_parser));

}

}

xml\_parser\_free($xml\_parser);

fclose ($fp);

$random = array\_rand ($GLOBALS["quotes"]);

$current\_quote = $GLOBALS["quotes"][$random];

echo "<p>" . $current\_quote["TEXT"] . "</p>";

echo "<p><i> - " . $current\_quote["AUTHOR"] . "</i></p>";

?>

</body>

</html>

# Ajax (1)

## Laboratory Sessions

Exercise 1 Suggested Answer:

Solution 1

<script language="JavaScript">

function rollDice (form) {

var num = form.numDice.value;

var faces = form.numFaces.value;

var total = 0;

var i;

for (i = 0; i < num; i++) {

total = total + Math.floor(Math.random()\*faces) + 1;

}

document.getElementById ("results").innerHTML = "You rolled: " + total;

}

</script>

<form name = "testForm">

<p>Enter the number of dice</p>

<input type = "text" name = "numDice">

<p>Enter the number of faces</p>

<input type = "text" name = "numFaces">

<input type="button" value="Roll Dem Bones" name="button" onClick="rollDice (this.form)">

</form>

<p id = "results">Total goes here</p>

Solution 2

<script language="Javascript">

function validateNumbers (txt) {

var i;

for (i = 0; i < txt.length; i++) {

if (isNaN (txt[i])) {

return false;

}

}

return true;

}

function validateSegment (txt, num) {

if (txt.length != num) {

return false;

}

if (!validateNumbers (txt)) {

return false;

}

return true;

}

function validate (form) {

var dob = form.dob.value;

var i;

var tokens = dob.split( "/" );

var result = true;

if (tokens.length != 3) {

return false;

}

if (validateSegment (tokens[0], 2) == false) {

return false;

}

if (validateSegment (tokens[1], 2) == false) {

return false;

}

if (validateSegment (tokens[2], 4) == false) {

return false;

}

return true;

}

function validateDoB (form) {

var result = validate (form);

document.getElementById("results").innerHTML

= "Validation: " + result;

}

</script>

<form name = "testForm">

<p>Enter a date of birth as dd/mm/yyyy </p>

<input type = "text" name = "dob">

<input type="button" value="Validate" name="button" onClick="validateDoB(this.form)">

</form>

<p id = "results">Total goes here</p>

# Ajax (2)

## Laboratory Sessions

Exercise 1 Suggested Answer:

Ajax-Enabled Frontend

<html>

<head>

<title>Javascript Stuff</title>

</head>

<body onLoad="updateComboBox ()">

<h1>My First Javascript</h1>

<script language="Javascript">

function updateFrontend (XML) {

var form = document.getElementById("mainForm")

var elements = XML.documentElement.getElementsByTagName("thing");

var id, description;

if (elements.length == 0) {

document.getElementById ("id").innerHTML = "";

form.description.value = "";

}

else {

description = elements[0].getElementsByTagName ("description");

form.description.value = description[0].firstChild.nodeValue;

}

}

function setupAjax(url) {

var url;

if (window.XMLHttpRequest) {

// Code for modern browsers

request=new XMLHttpRequest();

}

else {

// code for older versions of Internet Explorer

request = new ActiveXObject("Microsoft.XMLHTTP");

}

request.onreadystatechange=function() {

if (request.readyState==4 && request.status==200) {

if (request.responseXML) {

updateFrontend (request.responseXML);

}

}

}

request.open ("GET", url, true);

request.send();

}

function navigateDatabase (form) {

var url;

var id;

id = form.data.value;

url = 'query\_content\_xml.php?thing=' + id;

setupAjax (url);

}

function updateDatabase (form) {

var url

var desc;

var id;

id = form.data.value;

desc = form.description.value;

if (desc.length == 0) {

return;

}

url = 'update\_content\_xml.php?id=' + id + "&description=" + desc;

setupAjax (url);

}

function updateComboBox() {

var url;

url = "query\_content\_xml.php";

if (window.XMLHttpRequest) {

// Code for modern browsers

request=new XMLHttpRequest();

}

else {

// code for older versions of Internet Explorer

request = new ActiveXObject("Microsoft.XMLHTTP");

}

request.onreadystatechange=function() {

if (request.readyState==4 && request.status==200) {

var text = "";

var elements;

var id;

elements = request.responseXML.documentElement.getElementsByTagName("thing");

for (i = 0; i < elements.length; i++) {

id = elements[i].getElementsByTagName ("ID");

text += "<option>" + id[0].firstChild.nodeValue + "</option>";

}

document.getElementById ("data").innerHTML = text;

}

}

request.open ("GET", url, true);

request.send();

}

</script>

<form name = "mainForm" id = "mainForm">

<p>ID</p>

<select id = "data" onChange="navigateDatabase(this.form)">

</select>

<p>Description</p>

<input type = "text" name = "description" onBlur="updateDatabase (this.form)">

</form>

</body>

</html>

PHP Script for Querying

<?

header('Content-Type: text/xml; charset=utf-8');

$host = "localhost";

$user = "monke13\_nccuser";

$pass = "ncc1";

$database = "monke13\_ncc";

$thing = $\_GET["thing"];

$connection = mysql\_connect($host, $user, $pass)

or die ("Couldn't connect to database");

mysql\_select\_db ($database);

if ($thing) {

$query = "SELECT \* from Things where ID='$thing'";

}

else {

$query = "SELECT \* from Things";

}

$ret = mysql\_query ($query, $connection);

$num\_results = mysql\_num\_rows ($ret);

$doc = new DOMDocument();

$doc->formatOutput = true;

$root = $doc->createElement( "all\_things" );

$doc->appendChild( $root );

for ($i = 0; $i < $num\_results; $i++) {

$row = mysql\_fetch\_array ($ret);

$node = $doc->createElement( "thing" );

$name = $doc->createElement( "ID" );

$name->appendChild($doc->createTextNode($row["ID"]));

$node->appendChild( $name );

$description = $doc->createElement( "description" );

$description->appendChild($doc->createTextNode($row["Description"]));

$node->appendChild( $description );

$root->appendChild ($node);

}

mysql\_close($connection);

echo $doc->saveXML();

?>

PHP Script for Updating

<?

$host = "localhost";

$user = "monke13\_nccuser";

$pass = "ncc1";

$database = "monke13\_ncc";

$id= $\_GET["id"];

$description = $\_GET["description"];

$connection = mysql\_connect($host, $user, $pass)

or die ("Couldn't connect to database");

mysql\_select\_db ($database);

$id = mysql\_real\_escape\_string ($id);

$description = mysql\_real\_escape\_string ($description);

$query = "UPDATE Things SET Description = '$description' WHERE ID='$id'";

$ret = mysql\_query ($query, $connection);

mysql\_close($connection);

?>

# jQuery

## Laboratory Sessions

Exercise 1 Suggested Answer:

**Part 1:**

<html>

<head>

<title>Example Registration</title>

</head>

<body>

<script src="http://code.jquery.com/jquery-1.6.1.js"></script>

<script>

$(document).ready(function(){

$("form#slideout").hide();

$("input#slide").click (function(event) {

$("form#slideout").slideToggle ("slow");

});

});

</script>

<input type = "submit" id = "slide" value = "register">

<form id = "slideout" action = "attempt\_registration.php" method = "post">

<p>Username?</p>

<input type = "text" name = "username">

<p>Password</p>

<input type = "text" name = "password">

<p>Email?</p>

<input type = "text" name = "email">

<input type = "submit" value = "register">

<input type = "reset" value = "Clear values">

</body>

</html>

**Part 2:**

<html>

<head>

<title>Example Run Away Link</title>

</head>

<body>

<script src="http://code.jquery.com/jquery-1.6.1.js"></script>

<script>

function move() {

var top = Math.random() \* $(window).height();

var left = Math.random() \* $(window).width();

$("a#runaway").animate({"top" : top + "px", "left" : left + "px"}, 500);

}

$(document).ready(function(){

$("a#runaway").mouseover(move);

});

</script>

<a style="position: absolute"; id = "runaway" href = "#">Click me!</a>

</body>

</html>

**Part 3:**

<html>

<head>

<title>Example Run Away Link</title>

</head>

<body>

<ul>

<li>Point 1<l/i>

<ul>

<li>Point 2</li>

<ul>

<li>Point 3</li>

<ul>

<li>Point 4</li>

</ul>

</ul>

</ul>

</ul>

<script src="http://code.jquery.com/jquery-1.6.1.js"></script>

<script>

$(document).ready(function(){

$("a#cascade").click(function() {

var ind = 3;

var i, del = 0;

for (i = ind; i >= 0; i--) {

del += 1;

$("ul:eq(" + i + ")").delay (1000 \* del).fadeOut (1000);

}

});

});

</script>

<a id = "cascade" href = "#">Click me!</a>

</body>

</html>

# Integration Case Study

## Laboratory Sessions

Activity 1 Suggested Answer:

<html>

<head>

<title>Case Study Setup</title>

</head>

<body>

<?

$host = "localhost";

$user = "monke13\_nccuser";

$pass = "ncc1";

$database = "monke13\_ncc";

$connection = mysql\_connect($host, $user, $pass)

or die ("Couldn't connect to database");

mysql\_select\_db ($database);

$query = "DROP TABLE StockData";

$ret = mysql\_query ($query, $connection);

$query = "CREATE TABLE StockData( OpenID varchar (100), Stock varchar (15), Amount INT)";

$ret = mysql\_query ($query, $connection);

if ($ret) {

echo "<p>Table created!</p>";

}

else {

echo "<p>Something went wrong: " . mysql\_error(); + "</p>";

}

?>

</body>

</html>

Activity 2 Suggested Answer:

<?

header('Content-Type: text/xml; charset=utf-8');

$host = "localhost";

$user = "monke13\_nccuser";

$pass = "ncc1";

$database = "monke13\_ncc";

$thing = $\_GET["id"];

$connection = mysql\_connect($host, $user, $pass)

or die ("Couldn't connect to database");

mysql\_select\_db ($database);

$query = "SELECT \* from StockData where OpenID='$thing'";

$ret = mysql\_query ($query, $connection);

$num\_results = mysql\_num\_rows ($ret);

$soap = new SoapClient("http://www.webservicex.net/stockquote.asmx?WSDL");

$doc = new DOMDocument();

$doc->formatOutput = true;

$root = $doc->createElement( "all\_stocks" );

$doc->appendChild( $root );

for ($i = 0; $i < $num\_results; $i++) {

$row = mysql\_fetch\_array ($ret);

$node = $doc->createElement( "stock" );

$name = $doc->createElement( "stock\_name" );

$name->appendChild($doc->createTextNode($row["Stock"]));

$node->appendChild( $name );

$result = $soap->GetQuote(array('symbol' => $row["Stock"]));

$stock\_xml = new DOMDocument();

$stock\_xml->loadXML ( $result->GetQuoteResult );

$price = $doc->createElement( "stock\_price" );

$last = $stock\_xml->getElementsByTagName ("Last")->item(0)->nodeValue;

$price->appendChild($doc->createTextNode($last));

$node->appendChild( $price);

$amount= $doc->createElement( "stock\_amount" );

$amount ->appendChild($doc->createTextNode($row["Amount"]));

$node->appendChild( $amount);

$root->appendChild ($node);

}

mysql\_close($connection);

echo $doc->saveXML();

?>

Activity 3 Suggested Answer:

<?

$host = "localhost";

$user = "monke13\_nccuser";

$pass = "ncc1";

$database = "monke13\_ncc";

$id= $\_GET["id"];

$stock= $\_GET["stock"];

$amount= $\_GET["amount"];

$connection = mysql\_connect($host, $user, $pass)

or die ("Couldn't connect to database");

mysql\_select\_db ($database);

$query = "SELECT \* from StockData where OpenID ='$id' and Stock ='$stock'";

$ret = mysql\_query ($query, $connection);

$num\_results = mysql\_num\_rows ($ret);

if ($num\_results > 0) {

// We need to update a stock number here.

$row = mysql\_fetch\_array ($ret);

$amount = $amount + $row["Amount"];

echo "Amount is $amount";

$query = "UPDATE StockData SET Amount = '$amount' WHERE OpenID='$id' AND Stock ='$stock'";

$ret = mysql\_query ($query, $connection);

}

else {

$query = "INSERT INTO StockData (OpenID, Stock, Amount ) VALUES ('$id', '$stock', '$amount')";

$ret = mysql\_query ($query, $connection);

}

mysql\_close($connection);

?>

Activity 4 Suggested Answer:

<?

session\_start();

$user\_id = $\_SESSION["user\_id"];

?>

<html>

<head>

<title>Case Study Main Interface</title>

</head>

<body>

<script src="http://code.jquery.com/jquery-1.6.1.js"></script>

<h1>Logged in as <? echo $user\_id; ?></h1>

<h1>Your Stocks</h1>

<p id = "stock"> </p>

<form id = "new\_stock">

<p>Stock Code</p>

<input type = "text" id = "stock\_name">

<p>Amount</p>

<input type = "text" id = "amount">

<input type = "submit" value = "add">

<script>

function parseContent (xml) {

var text = "";

text += "<table>";

text += "<th>Stock Name</th>";

text += "<th>Stock Amount</th>";

text += "<th>Stock Price</th>";

text += "<th>Stock Value</th>";

$(xml).find("stock").each (function() {

text += "<tr>";

text += "<td>" + $(this).find ("stock\_name").text() + "</td>";

text += "<td>" + $(this).find ("stock\_amount").text() + "</td>";

text += "<td>" + $(this).find ("stock\_price").text() + "</td>";

text += "<td>" + $(this).find ("stock\_price").text() \* $(this).find ("stock\_amount").text()+ "</td>";

text += "</tr>";

});

text += "</table>";

$("p#stock").html (text);

}

function updateContent() {

$.ajax ({

type : "GET",

dataType: "XML",

url : "query\_stocks.php",

data : {"id" : $user\_id},

success : parseContent

});

}

$(document).ready(function(){

updateContent();

$('#new\_stock').submit(function() {

$.ajax ({

type : "GET",

dataType: "XML",

url : "add\_stocks.php",

data : {"id" : $user\_id, "stock" : $("#stock\_name").val(), "amount" : $("#amount").val()},

success : updateContent

});

})

});

</script>

</body>

</html>

Activity 5 Suggested Answer:

**First Page**

<html>

<head>

<title>Case Study Login</title>

</head>

<body>

<a href="login.php">Login with your Google Account</a>

</body>

</html>

**Login.php**

<?

require\_once 'openid.php';

$googleLogin = GoogleOpenID::createRequest("ncc/case\_study/return.php");

$googleLogin->redirect();

?>

**Return.php**

<?

session\_start();

require\_once 'openid.php';

$googleLogin = GoogleOpenID::getResponse();

if($googleLogin->success()){

$user\_id = $googleLogin->identity();

$\_SESSION["user\_id"] = $user\_id;

}

echo "<a href = \"frontend.php\">Go to Main Interface</a>";

?>