**Exercise 02\_05\_01 – Step 1**

ViewFiles.php

<head>

<!--

Exercise 02\_05\_01

Author: Mark J. Buckler

Date: October 8, 2017

Filename: ViewFiles.php

-->

<title>View Files</title>

<meta charset="UTF-8">

<meta name="viewport" content="initial-scale=1.0">

<script src="modernizr.custom.65897.js"></script>

</head>

<body>

<h2>View files</h2>

<?php

?>

</body>

</html>

------------------------------------

ViewFiles.php

<?php

$dir = "../Exercise 02\_01\_01";

$openDir = opendir($dir);

while ($curFile = readdir($openDir)) {

echo "$curFile<br>";

}

closedir($openDir);

?>

------------------------------------

ViewFiles.php

if (strcmp($curFile, '.') !== 0 && strcmp($curFile,   
 '..') !== 0) {

echo "$curFile<br>";

}

ViewFiles.php

if (strcmp($curFile, '.') !== 0 && strcmp($curFile,   
 '..') !== 0) {

echo "<a href=\"$dir/$curFile\">  
 $curFile</a><br>\n";

}

**Exercise 02\_05\_01 – Step 2**

ViewFiles2.php

$dir = "../Exercise 02\_01\_01";

$dirEntries = scandir($dir);

------------------------------------

ViewFiles2.php

foreach ($dirEntries as $entry) {

if (strcmp($entry, '.') !== 0 && strcmp($entry, '..')   
 !== 0) {

echo "<a href=\"$dir/$entry\">$entry</a><br>\n";

}

}

**Exercise 02\_05\_01 – Step 3**

ViewFiles3.php

echo "<table border='1' width='100%'>\n";

foreach ($dirEntries as $entry) {

if (strcmp($entry, '.') !== 0 && strcmp($entry, '..')   
 !== 0) {

echo "<a href=\"$dir/$entry\">$entry</a><br>\n";

}

}

echo "</table>\n";

------------------------------------

ViewFiles3.php

echo "<table border='1' width='100%'>\n";

echo "<tr><th colspan='4'>Directory Listing for <strong>" .   
 htmlentities($dir) . "</strong></th></tr>\n";

echo"<tr>";

echo "<th><strong><em>Name</em></strong></th>";

echo "<th><strong><em>Owner</em></strong></th>";

echo "<th><strong><em>Permissions</em></strong></th>";

echo "<th><strong><em>Size</em></strong></th>\n";

echo"</tr>\n";

ViewFiles3.php

if (strcmp($entry, '.') !== 0 && strcmp($entry, '..')   
 !== 0) {

$fullEntryName = $dir . "/" . $entry;

echo "<tr><td>";

if (is\_file($fullEntryName)) {

echo "<a href=\"$fullEntryName\">" .   
 htmlentities($entry) . "</a>";

}

else {

echo htmlentities($entry);

}

echo "</td><td align='center'>" .   
 fileowner($fullEntryName);

if (is\_file($fullEntryName)) {

$perms = fileperms($fullEntryName);

$perms = decoct($perms % 01000);

echo "</td><td align='center'>0$perms";

echo "</td><td align='right'>" .   
 number\_format(filesize($fullEntryName), 0) .   
 " bytes";

}

else {

echo "</td><td colspan='2'   
 align='center'>&lt;DIR&gt;";

}

echo "</td><tr>\n";

}

**Exercise 02\_05\_01 – Step 4**

FileUploader.php

<?php

?>

<form action="FileUploader.php" method="post"   
 enctype="multipart/form-data">

<input type="hidden" name="MAX\_FILE\_SIZE" value="25000">

File to upload:<br>

<input type="file" name="newFile"><br>

(25,000 byte limit)<br>

<input type="submit" name="upload" value="Upload the   
 File"><br>

</form>

**Exercise 02\_05\_01 – Step 5**

FileUploader.php

<?php

$dir = ".";

if (isset($\_POST['upload'])) {

if (isset($\_FILES['newFile'])) {

if (isset($\_FILES['oldFile'])) { // debug

}

else {

echo "There was an error uploading \"" .   
 htmlentities($\_FILES['newFile']['name']) .   
 "\".<br>\n";

}

}

}

?>

**Exercise 02\_05\_01 – Step 6**

FileUploader.php

if (isset($\_FILES['newFile'])) {

if (move\_uploaded\_file(  
 $\_FILES['newFile']['tmp\_name'], $dir . "/" .   
 $\_FILES['newFile']['name']) === true) {

chmod($dir . "/" . $\_FILES['newFile']['name'],   
 0644);

echo "File \"" . htmlentities(  
 $\_FILES['newFile']['name']) .   
 "\"successfully uploaded.<br>\n";

}

**Exercise 02\_05\_01 – Step 7**

FileDownloader.php

<?php

?>

<!doctype html>

<html>

<head>

<!--

Exercise 02\_05\_01

Author: Mark J. Buckler

Date: October 21, 2017

Filename: FileDownloder.php

-->

<title>File Download Error</title>

<meta charset="UTF-8">

<meta name="viewport" content="initial-scale=1.0">

<script src="modernizr.custom.65897.js"></script>

</head>

<body>

</body>

</html>

------------------------------------

FileDownloader.php

<body>

<p>There was an error downloading "<?php echo   
 htmlentities($\_GET['filename']); ?>"</p>

<p><?php echo htmlentities($errorMsg); ?></p>

</body>

FileDownloader.php

<?php

$dir = "../Exercise 02\_01\_01";

if (isset($\_GET['fileName'])) {

$fileToGet = $dir . "/" . stripslashes($\_GET['fileName']);

if (is\_readable($fileToGet)) {

$errorMsg = "";

$showErrorPage = true;  
 }

else {

$errorMsg = "Cannot read \"$fileToGet\"";

$showErrorPage = true;

}

}

else {

$errorMsg = "No filename specified";

$showErrorPage = true;

}

if ($showErrorPage) {

?>

------------------------------------

FileDownloader.php

</html>

<?php

}

?>

------------------------------------

ViewFiles4.php

echo "<a href=\"FileDownloader.php?fileName=$entry\">" .   
 htmlentities($entry) . "</a>";

------------------------------------

FileDownloader.php

if (is\_readable($fileToGet)) {

header("Content-Description: File Transfer");

header("Content-Type: application/force-download");

header("Content-Disposition: attachment; filename=\"" .   
 $\_GET['fileName'] . "\"");

header("Content-Transfer-Encoding: base64");

header("Content-Length: " . filesize($fileToGet));

readfile($fileToGet);

$showErrorPage = false;

}

**Exercise 02\_05\_01 – Step 8**

VisitorComments.php

?>

<h2>Visitor Comments</h2>

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

Your name: <input type="text" name="name"><br>

Your email: <input type="email" name="email"><br>

<textarea name="comment" rows="6"   
 cols="100"></textarea><br>

<input type="submit" name="save" value="Submit your   
 comment"><br>

</form>

------------------------------------

VisitorComments.php

<?php

$dir = "./comments";

if (is\_dir($dir)) {

if (isset($\_POST['save'])) {

if (empty($\_POST['name'])) {

echo "Unknown Visitor\n";

}

else {

$saveString = stripslashes($\_POST['name']) .   
 "\n";

echo "\$saveString: $saveString<br>";  
 }

}

}

else {

mkdir($dir);

chmod($dir, 0666);

} ?>

------------------------------------

VisitorComments.php

$saveString .= stripslashes($\_POST['email']) .   
 "\n";

$saveString .= date('r') . "\n";

$saveString .= stripslashes($\_POST['comment']) .   
 "\n";

echo "\$saveString: $saveString";

VisitorComments.php

echo "\$saveString: $saveString<br>";

$currentTime = microtime();

echo "\$currentTime: $currentTime <br>";

$timeArray = explode(" ", $currentTime);

echo var\_dump($timeArray) . "<br>";

$timeStamp = (float)$timeArray[1] +   
 (float)$timeArray[0];

echo "\$timeStamp: $timeStamp<br>";

$saveFileName = "$dir/Comment.$timeStamp.txt";

echo "\$saveFileName: $saveFileName<br>";

------------------------------------

VisitorComments.php

echo "\$saveFileName: $saveFileName<br>";

if (false) {

}

else {

echo "There was an error writing\"" .   
 htmlentities($saveFileName) .   
 "\".<br>\n";

}

------------------------------------

VisitorComments.php

if (file\_put\_contents($saveFileName,   
 $saveString) > 0) {

echo "File \"" . htmlentities($saveFileName)   
 . "\" successfully saved.<br>\n";

}

else {

echo "There was an error writing \"" .   
 htmlentities($saveFileName) .   
 "\".<br>\n";

}

**Exercise 02\_05\_01 – Step 9**

VisitorFeedback.php

<body>

<h2>Visitor Feedback</h2>

<hr>

------------------------------------

VisitorFeedback.php

<?php

$dir ="./comments";

if (is\_dir($dir)) {

$commentFiles = scandir($dir);

foreach ($commentFiles as $fileName) {

if ($fileName !== "." && $fileName !== "..") {

echo "From <strong>$fileName</strong><br>";

}

}

}

?>

------------------------------------

VisitorFeedback.php

echo "From <strong>$fileName</strong><br>";

echo "<pre>\n";

$comment = file\_get\_contents($dir . "/" .   
 $fileName);

echo $comment;

echo "</pre>\n";

echo "<hr>\n";

**Exercise 02\_05\_01 – Step 10**

VisitorFeedback2.php

<body>

<h2>Visitor Feedback 2</h2>

<hr>

------------------------------------

VisitorFeedback2.php

echo "<pre>\n";

readfile($dir . "/" . $fileName);

echo "</pre>\n";

**Exercise 02\_05\_01 – Step 11**

VisitorFeedback3.php

<body>

<h2>Visitor Feedback 3</h2>

<hr>

------------------------------------

VisitorFeedback3.php

echo "From <strong>$fileName</strong><br>";

$comment = file($dir . "/" . $fileName);

echo "From: " . htmlentities($comment[0]) .   
 "<br>\n";

echo "Email Address: " .   
 htmlentities($comment[1]) . "<br>\n";

echo "Date: " . htmlentities($comment[2]) .   
 "<br>\n";

$commentLines = count($comment);

for ($i = 3; $i < $commentLines; $i++) {

echo htmlentities($comment[$i]) . "<br>\n";

}

echo "<hr>\n";

**Exercise 02\_05\_01 – Step 12**

VisitorComments2.php

<body>

<h2>Visitor Comments 2</h2>

<hr>

------------------------------------

VisitorComments2.php

<form action="VisitorComments2.php" method="post">

------------------------------------

VisitorComments2.php

echo "\$saveFileName: $saveFileName<br>";

$fileHandle = fopen($saveFileName, "wb");

if ($fileHandle === false) {

echo "There was an error creating \"" .   
 htmlentities($saveFileName) .   
 "\".<br>\n";

}

else {

if (fwrite($fileHandle, $saveString) > 0) {

echo "Successfully wrote to file \"" .   
 htmlentities($saveFileName) .   
 "\".<br>\n";

}

else {

echo "There was an error writing to \""   
 . htmlentities($saveFileName) .   
 "\".<br>\n";

}

fclose($fileHandle);

}

**Exercise 02\_05\_01 – Step 13**

VisitorComments3.php

<body>

<h2>Visitor Comments 3</h2>

<hr>

------------------------------------

VisitorComments3.php

<form action="VisitorComments3.php" method="post">

------------------------------------

VisitorComments3.php

if (flock($fileHandle, LOCK\_EX)) {

if (fwrite($fileHandle, $saveString) >   
 0) {

echo "Successfully wrote to file \""   
 . htmlentities($saveFileName) .   
 "\".<br>\n";

}

else {

echo "There was an error writing to   
 \"" .   
 htmlentities($saveFileName) .   
 "\".<br>\n";

}

flock($fileHandle, LOCK\_UN);

}

fclose($fileHandle);

------------------------------------

VisitorComments3.php

else {

echo "There was an error locking file   
 \"" .   
 htmlentities($saveFileName) . "\"   
 for writing.<br>\n";

}

**Exercise 02\_05\_01 – Step 14**

VisitorFeedback4.php

<body>

<h2>Visitor Feedback 4</h2>

<hr>

------------------------------------

VisitorFeedback4.php

echo "From <strong>$fileName</strong><br>";

$fileHandle = fopen($dir . "/" . $fileName,   
 "rb");

if ($fileHandle === false) {

echo "There was an error reading file   
 \"$fileName\".<br>\n";

}

else {

echo "From: " . htmlentities($comment[0]) .   
 "<br>\n";

echo "Email Address: " .   
 htmlentities($comment[1]) . "<br>\n";

echo "Date: " . htmlentities($comment[2]) .   
 "<br>\n";

$commentLines = count($comment);

for ($i = 3; $i < $commentLines; $i++) {

echo htmlentities($comment[$i]) .   
 "<br>\n";

}

echo "<hr>\n";

fclose($fileHandle);

}

VisitorFeedback4.php

else {

$from = fgets($fileHandle);

echo "From: " . htmlentities($from) .   
 "<br>\n";

$email = fgets($fileHandle);

echo "Email Address: " .   
 htmlentities($email) . "<br>\n";

$date = fgets($fileHandle);

echo "Date: " . htmlentities($date) .   
 "<br>\n";

$comment = "";

while (!feof($fileHandle)) {

$comment .= fgets($fileHandle);

}

echo htmlentities($comment) . "<br>\n";

echo "<hr>\n";

fclose($fileHandle);

}

**Exercise 02\_05\_01 – Step 15**

BackupComments.php

<body>

<h2>Backup Comments</h2>

------------------------------------

BackupComments.php

<?php

$source = "./comments";

$destination = "./backups";

?>

------------------------------------

BackupComments.php

if (!is\_dir($destination)) {

echo "The backup directory \"$destination\" does not   
 exist.\n";

}

else {

}

------------------------------------

BackupComments.php

else {

if (is\_dir($source)) {

echo "The source directory \"$source\" does   
 exist.\n";

}

else {

echo "The source directory \"$source\" does not   
 exist.\n";

}

}

BackupComments.php

if (is\_dir($source)) {

$totalFiles = 0;

$filesMoved = 0;

$dirEntries = scandir($source);

foreach ($dirEntries as $entry) {

if ($entry !== "." && $entry !== "..") {

++$totalFiles;

if (copy("$source/$entry",   
 "$destination/$entry")) {

++$filesMoved;

}

else {

echo "Could not move file \"" .   
 htmlentities($entry) . "\".<br>\n";

}

}

}

echo "<p>$filesMoved of $totalFiles files   
 successfully backed up.</p>\n";

}

**Project 02\_05\_01**

TheGame.php

<?php

?>

<h1>Register for The Game</h1>

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

Username<br> <input type="text" name="userName"><br>

Password<br> <input type="password" name="password"><br>

Full Name<br> <input type="text" name="fullName"><br>

E-mail<br> <input type="email" name="email"><br>

Age<br> <input type="number" name="age"><br>

Screen Name<br> <input type="text"   
 name="screenName"><br>

Comments<br> <textarea name="comments" rows="6"   
 cols="40"></textarea><br>

<input type="submit" name="save" value="Submit Your   
 Registration"><br>

</form>

------------------------------------

TheGame.php

<?php

$dir = ".";

$saveFileName = "./TheGamers.txt";

$saveString = "";

$dataArray = array();

function displayAlert($message) {

echo "<script>alert(\"$message\")</script>";

}

if (is\_dir($dir)) {

if (isset($\_POST['save'])) {

if (empty($\_POST['userName'])) {

displayAlert("Unknown Visitor");

}

else {

$dataArray[] = stripslashes($\_POST['userName']);   
 // debug

echo "<pre>\n";

print\_r($dataArray);

echo "</pre>\n";

}

}

}

?>

TheGame.php

else {

$dataArray[] = stripslashes($\_POST['userName']);

$dataArray[] =   
 md5(stripslashes($\_POST['password']));

$dataArray[] = stripslashes($\_POST['fullName']);

$dataArray[] = stripslashes($\_POST['email']);

$dataArray[] = stripslashes($\_POST['age']);

$dataArray[] =   
 stripslashes($\_POST['screenName']);

$dataArray[] = stripslashes($\_POST['comments']);

// debug

echo "<pre>\n";

print\_r($dataArray);

echo "</pre>\n";

------------------------------------

TheGame.php

$saveString = implode(",", $dataArray);

$saveString .= "\n";

// debug

echo "\$saveString = $saveString<br>";

------------------------------------

TheGame.php

echo "\$saveString = $saveString";

$fileHandle = fopen($saveFileName, "ab");

if ($fileHandle === false) {

displayAlert("There was an error creating   
 $saveFileName.");

}

else {

fclose($fileHandle);

}

TheGame.php

else {

if (flock($fileHandle, LOCK\_EX)) {

if (fwrite($fileHandle, $saveString) >   
 0) {

displayAlert("Successfully wrote to   
 file $saveFileName.");

}

else {

displayAlert("There was an error   
 writing to $saveFileName.");

}

flock($fileHandle, LOCK\_UN);

}

else {

displayAlert("There was an error locking   
 file $saveFileName for writing.";

}

fclose($fileHandle);

}

------------------------------------

TheGame.php

</form>

<?php

$labels = array("Username",

"Password",

"Full Name",

"E-mail",

"Age",

"Screen Name",

"Comments");

echo "<hr>";

echo "<h3>The Gamers</h3>";

echo "<hr>";

?>

TheGame.php

$fileHandle = fopen($saveFileName, "rb");

if ($fileHandle === false) {

displayAlert("There was an error reading file   
 $saveFileName");

}

else {

$saveString = fgets($fileHandle);

while (!feof($fileHandle)) {

// debug

echo "\$saveString = $saveString . "<br>\n";

echo "<hr>\n";

$saveString = fgets($fileHandle);

}

fclose($fileHandle);

}

------------------------------------

TheGame.php

// debug

// echo "\$saveString = $saveString . "<br>\n";

$outputArray = explode(",", $saveString);

foreach ($outputArray as $key => $value) {

echo "$value<br>";

}

------------------------------------

TheGame.php

foreach ($outputArray as $key => $value) {

echo "<strong>$labels[$key]:</strong>   
 <em>$value</em><br>";

}