Section 2. Introduction and installation

The need for dynamic content

The Web is no longer static; it's dynamic. As the information content of the Web grows, so does the need to make Web sites more dynamic. Think of an e-shop that has 1,000 products. The owner has to create 1,000 Web pages (one for each product), and whenever anything changes, the owner has to change all those pages. Ouch!!! Wouldn't it be easier to have only one page that created and served the content on the fly from the information about the products stored in a database, depending on the client request?

Nowadays sites have to change constantly and provide up-to-date news, information, stock prices, and customized pages. PHP and SQL are two ways to make your site dynamic.

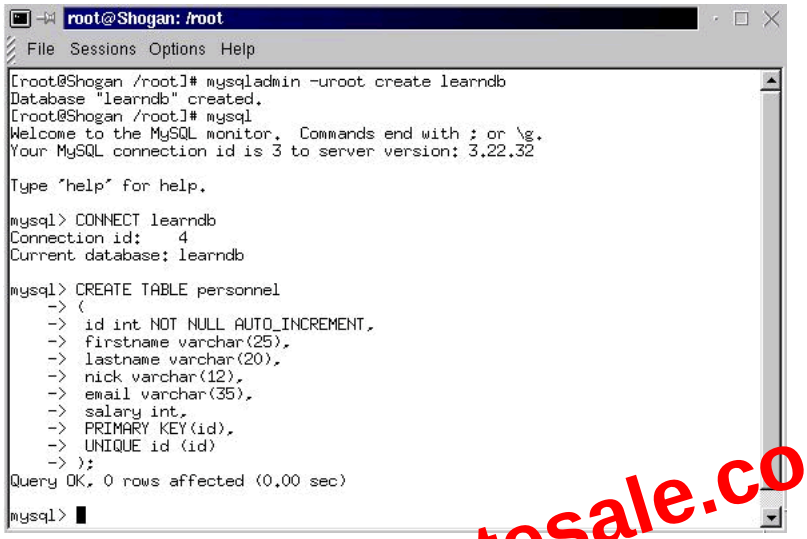
PHP PHP is a robust, server-side, open source scripting language that is extremely flexible and actually fun to learn. PHP is also cross platform, which means your PHP scripts will run on Unix, Linux, or an NT server.

MySQL SQL is the standard query language for interacting with databases. MySQL is an open source, SQL database server that is more or less free and extremely fast. MySQL is also cross platform.

```
  nick varchar(12),
  email varchar(35),
  salary int,
  PRIMARY KEY (id),
  UNIQUE id (id)
);

INSERT INTO personnel VALUES ('1','John','Lever','John', 'john@everywhere.net','75000');
INSERT INTO personnel VALUES ('2','Camilla','Anderson','Rose', 'rose@flower.com','66000');
```

This creates a table with 5 fields and puts some information in it.



Where's my view?

Now that we have a database with some information with it, let's see if we can view it with PHP. Save the following text as viewdb.php:

```
<HTML>
<?php
$db = mysql_connect("localhost", "root", "");
mysql_select_db("learndb",$db);
$result = mysql_query("SELECT * FROM personnel",$db);
echo "<TABLE>";
echo"<TR><TD><B>Full Name</B><TD><B>Nick Name</B><TD><B>Salary</B></TR>";
while ($myrow = mysql_fetch_array($result))
   {
   echo "<TR><TD>";
   echo $myrow["firstname"];
   echo " ";
   echo $myrow["lastname"];
   echo "<TD>";
   echo $myrow["nick"];
   echo "<TD>";
   echo $myrow["salary"];
   }
echo "</TABLE>";
?>
</HTML>
```

Run it through your browser and you will see a personnel database. But what is this code doing and how is it generated? Let's examine the code. First we declare a variable $db. In

providing query string ?id=1. Change the information and click update. Verify whether the database is updated by viewing the database with viewdb3.php.

Another new element was just introduced. It is the global PHP variable $PHP_SELF. This variable always contains the name of the script it is in and its location. We have used this variable in a '`form action`' so no matter what you name this file, this script will always post information to itself.

Once again we modify our viewing script incorporating this feature. Here's the listing for viewdb4.php:

```
<HTML>
<?php
$db = mysql_connect("localhost", "root", "");
mysql_select_db("learndb",$db);
$result = mysql_query("SELECT * FROM personnel",$db);
echo "<TABLE BORDER=2>";
echo"<TR><TD><B>Full Name</B><TD><B>Nick Name</B><TD><B>Options</B></TR>";
while ($myrow = mysql_fetch_array($result))
        {
        echo "<TR><TD>".$myrow["firstname"]." ".$myrow["lastname"]."</a><TD>".$myrow["nick"];
        echo "<TD><a href=\"view.php?id=".$myrow[id]."\">View</a>  ";
        echo "<a href=\"delete.php?id=".$myrow[id]."\">Delete</a>  ";
        echo "<a href=\"addedit.php?id=".$myrow[id]."\">Edit</a>";
        }
echo "</TABLE>";
?>
</HTML>
```

Searching our data

Information is useless if you can't find the data you require from a wealth of information. We need a way to search our database, so let's implement a search function. The page will show a static form initially and will show the search result when we have something submitted.


```
<HTML>
<?php
if ($searchstring)
        {
        $sql="SELECT * FROM personnel WHERE $searchtype LIKE '%$searchstring%' ORDER BY firstname ASC";
        $db = mysql_connect("localhost", "root", "");
        mysql_select_db("learndb",$db);
        $result = mysql_query($sql,$db);
        echo "<TABLE BORDER=2>";
        echo"<TR><TD><B>Full Name</B><TD><B>Nick Name</B><TD><B>Options</B></TR>";
        while ($myrow = mysql_fetch_array($result))
                {
                echo "<TR><TD>".$myrow["firstname"]."
".$myrow["nick"];
                echo "<TD><a href=\"view.php?id=".$myrow["id"]."\">View</a>";
                }
        echo "</TABLE>";
        }
else
        {
        ?>
        <form method="POST" action="<?php $PHP_SELF ?>">
        <table border="2" cellspacing="2">
        <tr><td>Insert you search string here</td>
        <td>Search type</td></tr>
        <tr>
        <td><input type="text" name="searchstring" size="28"></td>
        <td><select size="1" name="searchtype">
                <option selected value="firstname">First Name</option>
```