cgl@www:/$ echo "Now, we want to connect from a web application to the database."

Now, we want to connect from a web application to the database.
cgl@www:/$
cgl@www:/$ echo "Need to install the php mysql module to allow the connection from php scripts."
Need to install the php mysql module to allow the connection from php scripts.
cgl@www:/$
cgl@www:/$ apt-cache search php | grep mysql
php5-mysql - MySQL module for php5
php-mdb2-driver-mysql - PHP PEAR module to provide a MySQL driver for MDB2
php5-mysqlnd - MySQL module for php5 (Native Driver)
php5-mysqlnd-ms - MySQL replication and load balancing module for PHP
pinba-engine-mysql-5.5 - realtime statistics server for PHP using MySQL and a read-only interface
cgl@www:/$
cgl@www:/$ sudo apt-get install php5-mysql
cgl@www:$ sudo service apache2 restart
  * Restarting web server apache2
[ OK ]
cgl@www:$
cgl@www:/$ echo "Now we will create a simple PHP application to test the database connections."
Now we will create a simple PHP application to test the database connections.
cgl@www:/$
<?php

echo "Connecting to the database.<br/>"
$db_conn = new mysqli("database.dsutux.us", "sandlers", "24spices", "kfc");
if($db_conn->connect_errno) {
    $error = "Failed to connect to MySQL: ("
    $error .= $db_conn->connect_errno . ") " . $db_conn->connect_error;
    die($error);
}

echo "Choosing SQL statement.<br/>"
$sql = "SELECT x FROM recipe";

echo "Executing SQL statement.<br/>"
$result = $db_conn->query($sql);

echo "Displaying query results.<br/>"
while($row = $result->fetch_assoc()) {
    echo "x = " . $row['x'] . "<br/>";
}

echo "Done.<br/>";
?>
Connecting to the database.
Choosing SQL statement.
Executing SQL statement.
Displaying query results.
\[ x = 51 \]
\[ x = 42 \]
\[ x = 19 \]
Done.
The next set of slides demonstrate the error messages that occur if there are problems with the MySQL connection. You don't have to do them. They're just for reference.
Connecting to the database.
Failed to connect to MySQL: (2005) Unknown MySQL server host 'kfc.dsux.us' (11)
<?php
echo "Connecting to the database.<br/>");
$db_conn = new mysqli("kfc.dsutux.us", "sandars", "24spices", "kfc");
if($db_conn->connect_errno) {
    $error = "Failed to connect to MySQL: ("
    $error .= $db_conn->connect_errno . ") ". $db_conn->connect_error;
    die($error);
}

echo "Choosing SQL statement.<br/>");
$sql = "SELECT x FROM recipe";

echo "Executing SQL statement.<br/>");
$result = $db_conn->query($sql);

echo "Displaying query results.<br/>");
while($row = $result->fetch_assoc()) {
    echo " x = " . $row['x'] . "<br/>");
}

echo "Done.<br/>");
?>
Connecting to the database.
Failed to connect to MySQL: (1045) Access denied for user 'colonel'@'www.dsutux.us' (using password: YES)
<?php
echo "Connecting to the database.<br/>";
$db_conn = new mysqli("database.dsutux.us", "colonel", "24spices", "kfc");
if($db_conn->connect_errno) {
  $error = "Failed to connect to MySQL: (".$error.= $db_conn->connect_errno . ") ". $db_conn->connect_error;
  die($error);
}

echo "Choosing SQL statement.<br/>";
$sql = "SELECT x FROM recipe";

echo "Executing SQL statement.<br/>";
$result = $db_conn->query($sql);

echo "Displaying query results.<br/>";
while($row = $result->fetch_assoc()) {
  echo " x = " . $row["x"] . "<br/>";
}

echo "Done.<br/>";
?>
Connecting to the database.
Failed to connect to MySQL: (1045) Access denied for user 'sanders'@'www.dsutux.us' (using password: YES)
<?php

echo "Connecting to the database.<br/>
$db_conn = new mysqli("database.dsutux.us", "sanders", "spicegirls", "kfc");
if($db_conn->connect_errno) {
    $error = "Failed to connect to MySQL: (" . $db_conn->connect_errno . ") . $db_conn->connect_error;
    die($error);
}

echo "Choosing SQL statement.<br/>
$sql = "SELECT x FROM recipe";

echo "Executing SQL statement.<br/>
$result = $db_conn->query($sql);

echo "Displaying query results.<br/>
while($row = $result->fetch_assoc()) {
    echo " x = " . $row['x'] . "<br/>
}

echo "Done.<br/";"
Connecting to the database.
Failed to connect to MySQL: (1044) Access denied for user 'sanders'@'www.dsutux.us' to database 'chicken'
<?php

echo "Connecting to the database.<br/>";
$db_conn = new mysqli("database.dsutux.us", "sanderson", "24spices", "chicken");
if($db_conn->connect_errno) {
    $error = "Failed to connect to MySQL: ("
    $error .= $db_conn->connect_errno . ") " . $db_conn->connect_error;
    die($error);
}

echo "Choosing SQL statement.<br/>";
$sql = "SELECT x FROM recipe";

echo "Executing SQL statement.<br/>";
$result = $db_conn->query($sql);

echo "Displaying query results.<br/>";
while($row =$result->fetch_assoc()) {
    echo " x = " . $row['x'] . "<br/>";
}

echo "Done.<br/>"
?>
cgl@www:/$ echo "All of these errors will also be in the log file."
All of these errors will also be in the log file.
cgl@www:/$
cgl@www:$ sudo less /var/log/apache2/error.log
3] PHP Notice: Undefined index: page in /var/www/borta.dsutux.us/cool_app_from_the_web.php on line 6
[Tue Oct 07 22:05:32.812101 2014] [mpm_prefork:notice] [pid 10097] AH00169:caught SIGTERM, shutting down
[Tue Oct 07 22:05:34.119041 2014] [mpm_prefork:notice] [pid 22727] AH00163: Apache/2.4.7 (Ubuntu) PHP/5.5.9-1ubuntu4.4 configured -- resuming normal operations
[Tue Oct 07 22:05:34.119136 2014] [core:notice] [pid 22727] AH00094: Command line: '/usr/sbin/apache2'
(END)
cgl@www:/$ echo "Don't panic if you have an error. Just find the problem and fix it."
Don't panic if you have an error. Just find the problem and fix it.
cgl@www:/$