Mysql Database:

How to connect to databse:

```php
<?php

	$servername = "localhost";
	$username = "root";
	$password = "";

	// Create connection
	$conn = new mysqli($servername, $username, $password);
	// Check connection
	if ($conn->connect_error) {
		die("Connection failed: " . $conn->connect_error);
	}

	$conn->close();
?>
```

How to create database:

```php
<?php
	$servername = "localhost";
	$username = "root";
	$password = "";

	// Create connection
	$conn = new mysqli($servername, $username, $password);
	// Check connection
	if ($conn->connect_error) {
		die("Connection failed: " . $conn->connect_error);
	}
	// Create database
	$sql = "CREATE DATABASE testdb";
	if ($conn->query($sql) === TRUE) {
		echo "Database created successfully";
	}
	else
	{
		echo "Error creating database: " . $conn->error;
	}
	$conn->close();
?>
```

How to create database table:

```php
<?php
	$servername = "localhost";
	$username = "root";
	$password = "";
	$dbname = "testdb";

	// Create connection
	$conn = new mysqli($servername, $username, $password, $dbname);
	// Check connection
	if ($conn->connect_error) {
	die("Connection failed: " . $conn->connect_error);
	}

	// sql to create table
	$sql = "CREATE TABLE myguest(id INT(6) ,firstname VARCHAR(30))";

	if ($conn->query($sql) === TRUE) {
```

```php
        echo "Table MyGuests created successfully";
        } else {
        echo "Error creating table: " . $conn->error;
        }

        $conn->close();
?>
```

How to insert data into database:
```php
<?php
        $servername = "localhost";
        $username = "root";
        $password = "";
        $dbname = "testdb";
    $id=2;
    $uname="syam";
        // Create connection
        $conn = new mysqli($servername, $username, $password, $dbname);
        // Check connection
        if ($conn->connect_error) {
        die("Connection failed: " . $conn->connect_error);
        }

        // sql to insert into table
        $sql = "insert into myguest(id,firstname)values($id,'$uname')";

        if ($conn->query($sql) === TRUE) {
        echo "insertion on MyGuests is successfully";
        } else {
        echo "Error creating table: " . $conn->error;
        }

        $conn->close();
?>
```
How to get data from database table:
```php
<?php
        $servername = "localhost";
        $username = "root";
        $password = "";
        $dbname = "testdb";

        // Create connection
        $conn = new mysqli($servername, $username, $password, $dbname);
        // Check connection
        if ($conn->connect_error) {
                die("Connection failed: " . $conn->connect_error);
        }

        $sql = "SELECT id, firstname FROM myguest";
        $result = $conn->query($sql);
        if ($result->num_rows> 0)
        {
                // output data of each row
                while($row = $result->fetch_assoc())
                {
                        echo "id: " . $row["id"]. " - Name: " . $row["firstname"]."<br>";
                }
        }
         else
        {
```

```php
                        echo "0 results";
            }
            $conn->close();
?>
```

How to delete data from database table:

```php
<?php
        $servername = "localhost";
        $username = "root";
        $password = "";

        // Create connection
        $conn = new mysqli($servername, $username, $password,"testdb");
        // Check connection
        if ($conn->connect_error) {
                die("Connection failed: " . $conn->connect_error);
        }

        // delete row from table
        $sql = "DELETE FROM myguest WHERE id='1'";

        if ($conn->query($sql) === TRUE)
        {
                echo "row deleted  successfully";
        }
        else
        {
                echo "row deletion unsuccessfull : " . $conn->error;
        }
        $conn->close();
?>
```

How to update contents of database table:

```php
<?php
        $servername = "localhost";
        $username = "root";
        $password = "";

        // Create connection
        $conn = new mysqli($servername, $username, $password,"testdb");
        // Check connection
        if ($conn->connect_error) {
                die("Connection failed: " . $conn->connect_error);
        }

        // Create database
        $sql = "UPDATE myguest SET firstname='glen' WHERE id='1'";

        if ($conn->query($sql) === TRUE)
        {
                echo "updated successfully";
        }
        else {
                echo "update fail : " . $conn->error;
        }
        $conn->close();
?>
```

Forms and Mysql database and form validation:

```html
<!DOCTYPE html>
<html>
<head>

        <title></title>
   <script type="text/javascript">
   function validate()
   {
           if(document.getElementById("t1").value>100)
           {
                           alert("ID value should be less than 100");
           }
           else if(document.getElementById("t2").value.length<6)
           {
                           alert("name length should minimum of 6 characters");
           }
           else
           {
       document.getElementById("form1").submit();
           }
   }
   </script>
</head>
<body>
        <div>
                   <form id="form1" action="store.php" method="get">
                           <label>ID:</label><input type="text" id="t1" name="t1" placeholder="id should be
less than 100"/><br><br>
                           <label>Name:</label><input type="text" id="t2" name="t2" placeholder="name
should not be less than 6 characters"/><br><br>
       <button type="button" onclick="validate()">submit</button>
                   </form>
        </div>
</body>
</html>
```

Store.php:

```php
<?php
        $servername = "localhost";
        $username = "root";
        $password = "";
        $dbname = "testdb";
        $id=(int)$_GET["t1"];
        $uname=$_GET["t2"];
        // Create connection
        $conn = new mysqli($servername, $username, $password, $dbname);
        // Check connection
        if ($conn->connect_error) {
        die("Connection failed: " . $conn->connect_error);
        }

        // sql to insert into table
        $sql = "insert into myguest(id,firstname)values($id,'$uname')";

        if ($conn->query($sql) === TRUE) {
        echo "insertion on MyGuests is successfully";
        } else {
        echo "Error creating table: " . $conn->error;
```

```
        }

        $conn->close();
?>
```

Cookies:

What is a Cookie?

A cookie is often used to identify a user. A cookie is a small file that the server embeds on the user's computer. Each time the same computer requests a page with a browser, it will send the cookie too. With PHP, you can both create and retrieve cookie values.

Create Cookies With PHP

A cookie is created with the setcookie() function.

Syntax

setcookie(*name, value, expire, path, domain, secure, httponly*);

Only the *name* parameter is required. All other parameters are optional.

Create cookie:

Example:

Setcookie.php:
```
<?php
   //set cookie using setcookie() method
   setcookie("user","jordan",time()+86400,"/");
   echo "<a href='getcookie.php'>Go to getcookie.php</a>";
?>
```

getcookie.php:

```
<?php
   if(isset($_COOKIE["user"]))
   {
        //getting cookie value using its name
        echo "<h1>The cookie value :</h1>".$_COOKIE["user"];

   }
   else
   {
        echo "cookie is not set";
   }
?>
```

Deletecookie.php:

```php
<?php
//to delete cookie
// set the expiration date to one hour ago
setcookie("user", "", time() - 3600);
?>
<html>
<body>

<?php
echo "Cookie 'user' is deleted.";
?>

</body>
</html>
```

Sessions:

A session is a way to store information (in variables) to be used across multiple pages.

Unlike a cookie, the information is not stored on the users computer.

What is a PHP Session?

When you work with an application, you open it, do some changes, and then you close it. This is much like a Session. The computer knows who you are. It knows when you start the application and when you end. But on the internet there is one problem: the web server does not know who you are or what you do, because the HTTP address doesn't maintain state.

Session variables solve this problem by storing user information to be used across multiple pages (e.g. username, favorite color, etc). By default, session variables last until the user closes the browser.

So; Session variables hold information about one single user, and are available to all pages in one application.

Note: The session_start() function must be the very first thing in your document. Before any HTML tags.

Createsession.php

```php
<?php
   // Start the session
   session_start();
?>
<!DOCTYPE html>
<html>
  <body>

    <?php

      // Set session variables
      $_SESSION["favcolor"] = "green";
      $_SESSION["favanimal"] = "cat";
      echo "<h1>Session variables are set.</h1>";
    ?>
    <a href="getinfo.php">GET DATA</a><br><br>
    <a href="destroysession.php">DESTROY SESSION</a>
  </body>
</html>
```

getinfo.php:
```php
<?php
   session_start();
?>

<html>
 <body>

  <?php

    // Echo session variables that were set on previous page
    echo "<h2>Favorite color is " . $_SESSION["favcolor"] ." </h2> <br>";
    echo "<h2>Favorite animal is " . $_SESSION["favanimal"] ."</h2>";

  ?>
 </body>
</html>
```

destroysession.php:

```php
<?php
   session_start();
?>
<!DOCTYPE html>
<html>
  <body>

  <?php
   // remove all session variables
   session_unset();

   // destroy the session
   session_destroy();
   echo "<h2>session is destroyed</h2>";
  ?>

  </body>
</html>
```

Php super global variables:

Super Global variables:

$GLOBALS

$_SERVER

$_REQUEST

$_GET // refer passing parameters using get method

$_POST // refer passing parameters using post method

$_FILES // refer file upload program in file handling topic

$_COOKIE // refer cookie topic

$_SESSION // refer session topic

$GLOBALS:

Example:

```php
<?php

   $x=10;
   $y=20;
   function callme()
   {
         echo "accessed from function:".$GLOBALS['x'];
   }
   echo "ADD:".($x+$y)."<br>";
   callme();
?>
```

$_SERVER:

```php
<?php

   echo $_SERVER['PHP_SELF'];

   echo "<br>";

   echo $_SERVER['SERVER_NAME'];

   echo "<br>";

   echo $_SERVER['HTTP_HOST'];

   echo "<br>";

   echo $_SERVER['SCRIPT_NAME'];

   echo "<br>";

   echo $_SERVER['HTTP_USER_AGENT'];

   echo "<br>";

   echo $_SERVER['REQUEST_METHOD'];

   echo "<br>";

   echo $_SERVER['SERVER_PORT'];

?>
```

Output:

/SuperGlobalVariables/servervariable.php
localhost

localhost

/SuperGlobalVariables/servervariable.php

Mozilla/5.0 (Windows NT 6.2) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/61.0.3163.100
Safari/537.36

GET

80

$_REQUEST:

```php
<?php
        $uname=$_REQUEST["t1"]; // t1  is url parameter
        $id=$_REQUEST["t2"]; //t2 is url parameter
        echo "hai $uname welcome to new world";
?>
```