

Code for *class.Database.php*

```

class Database {
    var $DBconnection;
    var $DBname;
    var $DBuser;
    var $DBpassword;
    var $DBquery;
    var $DBresult;
    var $DBresultTest;

    function Database($DBconnection, $DBname, $DBuser, $DBpassword){
        $this->DBconnection=$DBconnection;
        $this->DBname=$DBname;
        $this->DBuser=$DBuser;
        $this->DBpassword=$DBpassword;
        mysql_connect($this->DBconnection, $this->DBuser, $this->DBpassword);
        mysql_select_db($this->DBname);
        $this->DBresultTest=0;
    }

    function result(){
        $this->DBresult = mysql_query ($this->DBquery);
        $this->DBresultTest =(mysql_num_rows($this->DBresult));
        return($this->DBresult);
    }

    function select($projectList, $tables, $selectCondition,$orderList="", $groupList=""){
        $SQLquery="select $projectList from $tables ";
        if (!is_null($selectCondition)) {$SQLquery.="where $selectCondition "};
        if (!($orderList=="")) {$SQLquery.="order by $orderList "};
        if (!($groupList=="")) {$SQLquery.="group by $groupList "};
        $this->DBquery=$SQLquery;
    }

    function update($table, $changes, $updateCondition=""){
        $SQLquery="update $table set $changes ";
        if (!($updateCondition=="")) {$SQLquery.="where $updateCondition "};
        $this->DBquery=$SQLquery;
    }

    function insert($table, $fieldlist, $values){
        $SQLquery="insert into $table ($fieldlist) values ($values)";
        $this->DBquery=$SQLquery;
    }

    function resultTest(){
        return ($this->DBresultTest);
    }
}

```

Code demonstrating *class.Database.php*

```

<?
require_once("../resources/class.Database.php");
$databseConnection = new Database("localhost:8889","empdb","root","root");
$databseConnection->select("*","emp","sal>23000","","");
$result=$databseConnection->result();
?>

<html>
<head><title>Example SQL class</title></head>
<body>

<?
while ($row = mysql_fetch_array($result)){
    print $row["empno"]." ".$row["ename"]." ".$row["sal"]."<br />";
};
?>

</body>
</html>

```

Code for *class.HTML.php*

```
class HTML {
    var $HTMLdocument;
    var $title;
    var $stylesheet;
    var $head;
    var $body;
    var $bodyContent;

    function HTML($title="", $stylesheet="") {
        $this->title=$title;
        $this->stylesheet=$stylesheet;
    }

    function append($part, $HTMLString) {
        switch ($part) {
            case 'HEAD':
                $this->head.=$HTMLString."\n";
                break;
            case 'BODY':
                $this->body.=$HTMLString."\n";
                break;
            case 'BODYCONTENT':
                $this->bodyContent.=$HTMLString."\n";
                break;
        }
    }

    function buildHead() {
        $this->append('HEAD', '<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">');
        $this->append('HEAD', '<a href="http://www.w3.org/TR/html4/loose.dtd">');
        $this->append('HEAD', '<html>');
        $this->append('HEAD', '<head>');
        if (!$this->stylesheet=="") {
            $this->append('HEAD', '<link rel="stylesheet" href=".'.$this->stylesheet.'"
                type="text/css">');
            $this->append('HEAD', '<style type="text/css" media="all">');
            $this->append('HEAD', '@import ".'.$this->stylesheet.'"');
            $this->append('HEAD', '@import ".'.$this->stylesheet.'"');
            $this->append('HEAD', '</style>');
        };
        if (!$this->title=="") { $this->append('HEAD', '<title>.'.$this->title.'</title>'); };
        $this->append('HEAD', '<meta http-equiv="Content-Type" content="text/html;
            charset=iso-8859-1">');
        $this->append('HEAD', '</head>');
    }

    function buildBody() {
        $this->append('BODY', '<body>');
        $this->body.=$this->bodyContent;
        $this->append('BODY', '</body>');
    }

    function addBodyContent($content) {
        $this->append('BODYCONTENT', $content);
    }

    function printHTML() {
        $this->buildHead();
        $this->buildBody();
        $this->HTMLdocument=$this->head;
        $this->HTMLdocument.=$this->body;
        return ($this->HTMLdocument);
    }
}
}
```

Code demonstrating *class.HTML.php*

```
<?
require_once("../resources/class.HTML.php");

$document = new HTML("Example document", "");
$document->addBodyContent("<h1>Heading example</h1>");
$document->addBodyContent("<p>Here is a paragraph</p>");
print $document->printHTML();
?>
```

Code for *class.Joke.php*

```
<?
include_once("../resources/config.php");
require_once("../resources/class.Database.php");

class Joke {
    var $jokeNo;
    var $jokeTitle;
    var $jokeBody;
    var $displayed;
    var $userNo;

    function Joke($displayedDate=""){
        global $DBconnection,$DBdatabasename,$DBusername,$DBpassword;
        $database=new Database($DBconnection,$DBdatabasename,$DBusername,$DBpassword);
        $database->select("","joke,jokeday","joke.jokeno=jokeday.jokeno and
            displayedDate='".$displayedDate."'");
        $dateResult=$database->result();

        if (!$database->resultTest()){
            # no joke present for today - will need to select one
            $database->select("jokeNo","joke","displayed='N'");
            $jokeResult=$database->result();

            if (!$database->resultTest()){
                # all jokes have been displayed so reset all joke displayed fields
                $database->update("joke","displayed='N'");
                $jokeResult=$database->result();
                # produce the non-selected list again
                $database->select("jokeNo","joke","displayed='N'");
                $jokeResult=$database->result();
            };
            $newJokeNo=rand(1,mysql_num_rows($jokeResult));
            $recordCount=1;
            # Iterate through the array till we get to the new joke
            while(($row = mysql_fetch_array($jokeResult)) and ($recordCount<$newJokeNo))
                { $recordCount++; };
            # Change joke in joke table to indicate displayed
            $database->update("joke","displayed='Y',"jokeno=".$row['jokeNo']);
            $jokeResult=$database->result();

            # Insert new record into jokeDay table with jokeNo and todays date
            $database->insert("jokeday","jokeNo,displayedDate",$row['jokeNo']."','".$
                $displayedDate."'");
            $jokeResult=$database->result();

            # Finally - get todays joke for the next part
            $database->select("","joke,jokeday","joke.jokeno=jokeday.jokeno and
                displayedDate='".$displayedDate."'");
            $dateResult=$database->result();
        };

        $dateRow=mysql_fetch_array($dateResult);

        $this->jokeNo=$dateRow["jokeNo"];
        $this->jokeTitle=$dateRow["jokeTitle"];
        $this->jokeBody=$dateRow["jokeBody"];
        $this->displayed=$dateRow["displayed"];
        $this->userNo=$dateRow["userNo"];
    }

    function get_JokeBody(){
        return ($this->jokeBody);
    }

    function get_JokeTitle(){
        return ($this->jokeTitle);
    }
}
```

Code for *class.SQLDate.php*

```
<?
class SQLDate {
    var $todaysDate;

    function SQLDate(){
        $todaysDate=localtime();
        $dayNo=$todaysDate[3];
        $monthNo=$todaysDate[4]+1; # January is returned as 0
        $yearNo=$todaysDate[5]+1900; # Years since 1900 so need to add 1900
        $this->todaysDate=$yearNo."-".$monthNo."-".$dayNo;
    }

    function get_SQLDate(){
        return ($this->todaysDate);
    }
}
?>
```

Code for *index.php*

```
<?
require_once("../resources/class.Joke.php");
require_once("../resources/class.SQLDate.php");
require_once("../resources/class.JokeHTML.php");

$today= new SQLDate();
$todayJoke=new Joke($today->get_SQLDate());
$content= new JokeHTML("BadJokeCity.com", "../resources/bluestyles.css");
$content->buildBanner("BadJokeCity.com","The first place to look for bad jokes","Todays Bad Joke");

$row_0 = array("Main page", "index.php");
$row_1 = array("FAQ", "FAQ.php");
$row_2 = array("User Login", "../user/login.php");
$arrayStructure=array($row_0,$row_1,$row_2);

$content-> buildLeftSideBar ($arrayStructure);

$content-> buildMain($todayJoke->get_JokeTitle(),$todayJoke->get_jokeBody());

$content-> buildFooter ($arrayStructure);

print $content->printHTML();
?>
```

Code for *class.JokeHTML.php*

```
<?
require_once('../resources/class.HTML.php');

class JokeHTML extends HTML {
    var $banner;
    var $main;
    var $leftsidebar;
    var $footer;

    function JokeHTML($title,$stylesheet){
        $this->HTML($title,$stylesheet);
    }

    function append($part,$HTMLString){
        parent::append($part,$HTMLString);
        switch ($part) {
            case 'BANNER':
                $this->banner.=$HTMLString."\n";
                break;
            case 'MAIN':
                $this->main.=$HTMLString."\n";
                break;
            case 'LEFTSIDEBAR':
                $this->leftsidebar.=$HTMLString."\n";
                break;
            case 'FOOTER':
                $this->footer.=$HTMLString."\n";
        }
    }

    function buildBody(){
        $this->append('BODY','<body>');
        $this->append('BODY','<div id="banner">');
        $this->body.=$this->banner;
        $this->append('BODY','</div>');
        $this->append('BODY','<div id="main">');
        $this->append('BODY','<div id="leftsidebar">');
        $this->body.=$this->leftsidebar;
        $this->append('BODY','</div>');
        $this->body.=$this->main;
        $this->append('BODY','</div>');
        $this->append('BODY','<div id="footer">');
        $this->body.=$this->footer;
        $this->append('BODY','</div>');
        $this->append('BODY','</body>');
        $this->append('BODY','</html>');
    }

    function buildBanner($h1Title, $h2Title, $h3Title){
        $this->append('BANNER',"<h1>$h1Title</h1>");
        $this->append('BANNER',"<h2>$h2Title</h2>");
        $this->append('BANNER',"<h3>$h3Title</h3>");
    }

    function buildLeftSideBar($menuItems){
        $noOfMenuItems=count($menuItems);
        for($menuIndex=0;$menuIndex<$noOfMenuItems;++$menuIndex){
            $link=$menuItems[$menuIndex][1];
            $content=$menuItems[$menuIndex][0];
            $this->append('LEFTSIDEBAR','<a href="'.$link.'">'.$content.'</a>');
        }
    }

    function buildMain($jokeTitle, $jokeBody){
        $this->append('MAIN',"<h1>$jokeTitle</h1>");
        $this->append('MAIN',"<p>$jokeBody</p>");
    }

    function buildFooter($menuItems){
        $noOfMenuItems=count($menuItems);
        for($menuIndex=0;$menuIndex<$noOfMenuItems;++$menuIndex){
            $link=$menuItems[$menuIndex][1];
            $content=$menuItems[$menuIndex][0];
            $this->append('FOOTER','<a href="'.$link.'">'.$content.'</a>');
        }
    }
}
?>
```