* MYSQL – Setting up the database

1. Database created and used for the project=>short\_url

used query=>create database short\_url;

used query=> use short\_url;

2. Created table in the database=>shortenurl

used query=>

create table shorten\_url(

id int(11) not null auto\_increment,

short varchar(6) not null,

url varchar(1000) not null,

primary key(id),

);

Second field “short” part of the url, for any site here, mysite.com/xxxx where xxxx will be replaced by the short part.The next field is the actual url that is being shortened-urls can vary in size so 1000 is used we can also use any other datatype that have enough space that can store the link but here varchar(1000) is used.

Now the first file a simple form is made in php named as index.php=>

<!doctype html>

<html>

<head>

<meta charset="utf-8">

<title>shorten your urls</title>

<link href="style\_index.css" rel="stylesheet" type="text/css">

</head>

<body>

<div id="wrapper">

<div id="header">SHORTEN YOUR URLS</div>

<div id="block">

<p style="font-size:16px;">Shorten your URL, make it suspicious</p><br/>

<form id="shorten\_form" name="shorten\_form" method="post" action="shorten.php">

<input type="text" name="url" id="url" placeholder="YourURL..." class="text"/>

<input type="submit" name="submit" id="submit" value=" Shorten " />

</form>

</div>

<div id="footer">Created by Satyendra. Student@IITR</div>

</div>

</body>

</html>

This form gets the processing from the file named as shorten.php also a css file is used for the index page so that it looks good.apart from that some inline css is also used for styling.

Shorten.php=>

<!doctype html>

<html>

<head>

<meta charset="utf-8">

<title>shorten your urls</title>

<link href="shorten.css" rel="stylesheet" type="text/css">

</head>

<body>

<div id="wrapper">

<div id="header">SHORTEN YOUR URLS</div>

<div id="block">

<p style="font-size:16px;">Shorten your URL, make it suspicious</p><br/>

<?php

include 'connect\_and\_generate.php';

?>

<div id="block2">

<p align="center">Your URL: <strong style="color:#090"><?php echo $\_POST['url']; ?></strong></p>

<p align="center">&nbsp;</p>

<p align="center">Has been shortened to: <strong style="color:#090"><?php echo geturl($\_POST['url']); ?></strong></p>

<p align="center">Want to shorten any other url <a href="index.php" style="color:red;text-decoration:none;">Click here</a></p>

</div></div>

<div id="footer">Created by Satyendra. Student@IITR</div>

</div>

</body>

</html>

This file ouput some details from database to the user.

This file includes a connect\_and\_generate.php file that is used to connect to the database , url generating procedure and inserting procedure.

Connect\_and\_generate.php=>

<?php

function dbconnect(){

$connect = mysql\_connect('localhost', 'root', '') or die(mysql\_error());// as no password is used if use password insert it with in the third comas.

$db\_selected = mysql\_select\_db('short\_url', $connect) or die(mysql\_error());//;

}

function generateurl($myurl=4)

{

dbconnect();

$mystring = 'abcdefghijklmnopqrstuvwxyz0123456789';

return str\_shuffle(

substr(str\_shuffle($mystring),0,$myurl)

);

}

function geturl($in)

{

dbconnect();

do{

$out = generateurl();

$query = "SELECT short FROM `shortenurl` WHERE `short` = '$out'";

$result = mysql\_query($query);

} while (mysql\_num\_rows($result) >1);

$insert\_query = "INSERT INTO `shortenurl` (`id`, `short`, `url`) VALUES (NULL, '$out', '$in');";

$result = mysql\_query($insert\_query);

return "http://mysite.com/".$out;

}

?>

function dbconnect() is used to connect to the database.In which function

Mysql\_connect is used to connect to the database and mysql\_select\_db is used to select the database that was created. die()function with mysql\_error() is used if there is any error connecting or selecting the database. function generateurl() is used to create a string of 4 characters that will consist of a-z0-9 substr(str\_shuffle) is used to create string everytime.

.another function geturl() with parameter $in is made,this is the unshortened url that is used to send to send t the function that it will return the shortened url after it is been inserted in to the database.do while which will create a shortened url with the generateurl() function. Query is created to check if the generated url has already been taken (do while is used for this). Simple insert query is used to insert the details from the user and output is returned that includes that short url plus whatever url you want here (mysite.com/ is used).slash after the domain is important.

For redirecting one more file is used that is

Forward.php=>

<?php

include 'connect\_and\_generate.php';

$i = $\_SERVER['QUERY\_STRING'];

if (preg\_match("/^[0-9a-z]{4}$/", $i)) {

dbconnect();

$result = mysql\_query("SELECT short, url FROM `short\_urls` WHERE `short` = '$i'") or die(mysql\_error());

if (mysql\_num\_rows($result) < 1) {

header("Location: http://domainthatuhave.me");

exit;

}else

{

$row = mysql\_fetch\_row($result);

header("Location: ".$row[1]);

}

}

else

{

header("Location: http://domainthatuhave.com");

}

?>

uery string is used for assigning the query string to a variable which comes after the slash of a domain example.com/querystring.

Then the next line is to make sure that it is a short url and not anyother file on the server.

then connection to the database, then short url is passed into a mysql query to check if the short url actually exists,

and if it eists what does it corresponds to.

Then some error checking,

if the short url doesnt exist we direct the user to domainthatuhave using the header function but if it exist

the header function is used to redirect the user to the long url that matches the short in the database.

Finally a configuration file is used that is

htaccess file

htaccess file =>

with following details is uploaded on the server for the configuration

that is used for parsing the query string from domainthatuhave.com/xxxx to forward.php.

We need to upload the following as the .htaccess file on the server that is used.that make the procedure work.

XBitHack Off

RewriteEngine On

RewriteCond %{REQUEST\_URI} \/([0-9a-z]{4})$ [NC]

RewriteRule ^(.\*) http://www.domainthatuhave.com/forward.php?%1 [L]

Thankyou