* Lehenengo **users** taula aldatu behar da eta eremu berria sortu: **google\_auth\_code  -> varchar(16)**
* **googleLib** karpeta sortu eta barruan **GoogleAuthenticator.php** fitxategia kopiatu.
* **login.php** aldatu:

Saioa erabiliko dugu erabiltzailearen informazioa gordetzeko eta google authenticator sartuko dugu:

<?php

*//Saioa ez badago hutsik hurrengo pausura bidaltzen da*  
*session\_start*();  
if(!empty($\_SESSION['id']))  
{  
 *header*('Location: http://localhost:8080/ejemploPDO-ga/device\_confirmations.php');  
}  
*//google authenticator*require\_once 'googleLib/GoogleAuthenticator.php';  
$ga = new GoogleAuthenticator();  
$secret = $ga->createSecret(); *//This function will create unique secret key*

--------Datu basearen atzipena

if ($result != false){  
 *//saioa gordetzen dugu*

$\_SESSION['id']=$result['id']; *// user id* $\_SESSION['username']=$result['username']; *//username*  
 $\_SESSION['google\_auth\_code']=$result['google\_auth\_code']; *//google kodea* $dbh = null;

//Berbideratzen da OTP eskatzeko hurrengo pausura  
 *header*('Location: http://localhost:8080......./device\_confirmations.php');  
}  
else{  
 *http\_response\_code*(500);  
 die('Error establishing connection with database');  
}  
  
------------Kodigoa

* **device\_confirmations.php** fitxategia sortu:

<?php

*//Saioa hutsik badago loginera berbidali*  
*session\_start*();  
if(empty($\_SESSION['id']))  
{  
 *header*("Location: login.php");  
}

*//Saioan gordeta dauden datuekin QR-a marraztu eta hurrengo pausura berbideratu*

$secret=$\_SESSION['google\_auth\_code'];  
$username=$\_SESSION['username'];

require\_once 'googleLib/GoogleAuthenticator.php';  
$ga = new GoogleAuthenticator();  
$qrCodeUrl = $ga->getQRCodeGoogleUrl($username, $secret,'ejemploPDO');  
?>

//HTML Code  
Enter the verification code generated by Google Authenticator app on your phone.  
<div id="img">  
 <img src='<?php echo $qrCodeUrl; ?>' />  
</div>  
  
<form method="post" action="home.php">  
 <label>Enter Google Authenticator Code</label>  
 <input type="text" name="code" />  
 <input type="submit" class="button"/>  
</form>

* **home.php** fitxategia sortu

?php  
*session\_start*();  
if($\_POST['code'])  
{

*//Saioan gordeta dauden secret eta kodea konparatu*  
 $code=$\_POST['code'];  
 $secret=$\_SESSION['google\_auth\_code'];  
 $username=$\_SESSION['username'];  
 require\_once 'googleLib/GoogleAuthenticator.php';  
 $ga = new GoogleAuthenticator();  
 $checkResult = $ga->verifyCode($secret, $code, 8); *// 8 = 8\*30sec clock tolerance* if ($checkResult)  
 {  
 $\_SESSION['googleCode']=$code;  
 }  
 else  
 {  
 echo 'FAILED';  
 }  
}  
else {  
 *http\_response\_code*(500);  
 die('Error. You need a code');  
}  
?>  
<h1>Welcome <?php echo $username. " code: ".$code;; ?></h1>