

## TASK 2

Create database *task2* with 2 tables:

### **qr\_code**

id\_qr\_code  
file\_name  
title  
code

### **statistic**

id\_statistic  
id\_qr\_code  
user\_agent  
ip\_address  
promo\_code  
date\_time

Create file *create\_qr\_code.php* which generates 4 QR codes. Images with QR codes put in *codes* folder. Define the file name as you wish. Content of each QR code is URL in format:

`http://your_ngrok_address/your_folder/scan.php?code=random_code`

Parameter *code* is unique for every QR code and should be a random number from 4 to 6 numbers long. For generating random number you can use code below:

```
$length = mt_rand(4, 6);  
$down = 0;  
$up = 9;  
$i = 0;  
$code = "";  
  
while ($i < $length) {  
    $code .= mt_rand($down, $up);  
    $i++;  
}  
settype($code, "integer");
```

More info: <https://www.php.net/manual/en/function.mt-rand.php>

After generating QR codes put data in *qr\_code* table. Title is a string that will be shown below every QR code on *index.php* page.

Create *index.php* page which will shown 4 QR codes from *qr\_code* table. For showing QR codes create function *getQrCodeData* which will return data from *qr\_code* table in array format. Using *foreach* function write out all data from that array (QR code image and title)

Create *scan.php* page which receives *code* parameter with GET method. After receiving data *scan.php* you need to check if *code* is integer and if it exists in *qr\_code* table. For checking this create function *codeExists*. This function returns *id\_qr\_code* for valid code and *false* for invalid code. If code exists and **scan** cookie is not set, insert data into *statistic* table and create random *promo code* and show it to the user. Promo code is random number from 3 to 7 numbers long. After that create cookie **scan** which has value **YES** and lifetime of 15 minutes. For testing purposes reduce the lifetime of cookie, for example to 30 seconds.

If *code* doesn't exist in table write out message "Invalid data, have a good day!".

For inserting data in *statistic* table create *insertIntoStatistic* function. For creating random promo code create *createPromoCode* function.

Create *statistics.php* page which shown all data from *statistic* table in descending order based on date. Data should be presented in table format.

Create *db.php* file for database connection code, *config.php* file for config parameters and *functions.php* file for function definitions. These files are included in *index.php*, *create\_qr\_code.php*, *scan.php* and *statistics.php*

**Important:** Test your project with *ngrok* and your mobile phone. You should have QR code scanner installed on your mobile device.

**Help:** use files from *help* folder in *task2.zip* file. For generating QR codes use *phpqrcode* class and examples from *02.zip* file.