



Tugas

- Buatlah fungsi captcha pada projek web masing-masing.

Repository GitHub : <https://github.com/afandiaziz/perkuliah>

Menambahkan captcha pada form Login

```
1 <h1 class="fw-bold text-center">Login</h1>
2 <?php
3 if ($error) {
4     echo '<div class="alert alert-danger" role="alert">' . $error . '</div>';
5 }
6 ?>
7 <form action="" method="POST">
8     <div class="form-group mb-2">
9         <label for="username" class="text-capitalize">Username</label>
10        <input type="text" class="form-control" id="username" name="username" required autocomplete="off" autofocus placeholder="Username">
11    </div>
12    <div class="form-group mb-3">
13        <label for="password" class="text-capitalize">password</label>
14        <input type="password" class="form-control" id="password" name="password" required autocomplete="off" placeholder="password">
15    </div>
16    <div class="form-group mb-3">
17        <label for="captcha" class="text-capitalize">captcha</label>
18        <div class="my-2"></div>
19        <input type="text" class="form-control text-uppercase" id="captcha" name="captcha" required autocomplete="off" placeholder="captcha">
20    </div>
21    <div class="form-group mb-2">
22        <button class="btn btn-primary" name="submit" type="submit">
23            Sign In
24        </button>
25        <span class="ms-2">Belum punya akun? <a href="register.php">Daftar</a></span>
26    </div>
27 </form>
```

Menambahkan captcha pada form Register

```
1 <h1 class="fw-bold text-center">Register</h1>
2 <?php
3 if ($error) {
4     echo '<div class="alert alert-danger" role="alert">' . $error . '</div>';
5 }
6 ?>
7 <form action="" method="POST">
8     <div class="form-group mb-2">
9         <label for="name" class="text-capitalize">name</label>
10        <input type="text" class="form-control" id="name" name="name" required autocomplete="off" autofocus placeholder="name">
11    </div>
12    <div class="form-group mb-2">
13        <label for="username" class="text-capitalize">Username</label>
14        <input type="text" class="form-control" id="username" name="username" required autocomplete="off" placeholder="Username">
15    </div>
16    <div class="form-group mb-2">
17        <label for="email" class="text-capitalize">email</label>
18        <input type="email" class="form-control" id="email" name="email" required autocomplete="off" placeholder="email">
19    </div>
20    <div class="form-group mb-3">
21        <label for="password" class="text-capitalize">password</label>
22        <input type="password" class="form-control" id="password" name="password" required autocomplete="off" placeholder="password">
23        <?php
24        if ($validate) {
25            echo '<div class="small text-danger">' . $validate . '</div>';
26        }
27        ?>
28    </div>
29    <div class="form-group mb-3">
30        <label for="repassword" class="text-capitalize">Re password</label>
31        <input type="password" class="form-control" id="repassword" name="repassword" required autocomplete="off" placeholder="repassword">
32        <?php
33        if ($validate) {
34            echo '<div class="small text-danger">' . $validate . '</div>';
35        }
36        ?>
37    </div>
38    <div class="form-group mb-3">
39        <label for="captcha" class="text-capitalize">captcha</label>
40        <div class="my-2"></div>
41        <input type="text" class="form-control text-uppercase" id="captcha" name="captcha" required autocomplete="off" placeholder="captcha">
42    </div>
43    <div class="form-group mb-2">
44        <button class="btn btn-primary" name="submit" type="submit">
45            Sign Up
46        </button>
47        <span class="ms-2">Sudah punya akun? <a href="login.php">Login</a></span>
48    </div>
49 </form>
```

Membuat fungsi untuk generate captcha menjadi *img* dan dibuat *session* captcha

```
1 <?php
2 session_start();
3 function acakCaptcha()
4 {
5     $karakter = 'ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890';
6     $results = [];
7     $karakter_panjang = strlen($karakter) - 2;
8     for ($i = 0; $i < 5; $i++) {
9         $n = rand(0, $karakter_panjang);
10        $results[] = $karakter[$n];
11    }
12    return implode($results);
13 }
14
15 $code = acakCaptcha();
16 $_SESSION['captcha'] = $code;
17
18 $wh = imagecreatetruecolor(120, 40);
19 $bgc = imagecolorallocate($wh, 22, 86, 165);
20 $fc = imagecolorallocate($wh, 223, 230, 233);
21 imagefill($wh, 0, 0, $bgc);
22 imagestring($wh, 8, 35, 12, $code, $fc);
23
24 header('Content-type: image/png');
25 imagejpeg($wh);
26 imagedestroy($wh);
27
```

Membuat *if condition* captcha benar atau salah pada process login

```
1  if (isset($_POST['submit'])) {
2      $username = mysqli_real_escape_string($conn, stripslashes($_POST['username']));
3      $password = mysqli_real_escape_string($conn, stripslashes($_POST['password']));
4      if (!empty(trim($username)) && !empty(trim($password))) {
5          if ($_SESSION['captcha'] == strtoupper($_POST['captcha'])) {
6              $query = "SELECT * FROM users WHERE username='$username'";
7              $result = mysqli_query($conn, $query);
8              if (mysqli_num_rows($result) == 1) {
9                  if (password_verify($password, mysqli_fetch_assoc($result)['password'])) {
10                     $_SESSION['username'] = $username;
11                     header('location:index.php');
12                 } else {
13                     $error = 'Password salah';
14                 }
15             } else {
16                 $error = 'Username salah';
17             }
18         } else {
19             $error = 'Captcha salah';
20         }
21     } else {
22         $error = 'Username dan Password tidak boleh kosong';
23     }
24 }
```

Membuat *if condition* captcha benar atau salah pada process register

```
1  if (isset($_POST['submit'])) {
2      $name = mysqli_real_escape_string($conn, stripslashes($_POST['name']));
3      $username = mysqli_real_escape_string($conn, stripslashes($_POST['username']));
4      $password = mysqli_real_escape_string($conn, stripslashes($_POST['password']));
5      $email = mysqli_real_escape_string($conn, stripslashes($_POST['email']));
6      $repassword = mysqli_real_escape_string($conn, stripslashes($_POST['repassword']));
7
8      if ($_SESSION['captcha'] == strtoupper($_POST['captcha'])) {
9          if (!empty(trim($username)) && !empty(trim($password)) && !empty(trim($repassword)) && !empty(trim($email)) && !empty(trim($name))) {
10             if ($repassword == $password) {
11                 if (cek_username($username, $conn)) {
12                     $password = password_hash($password, PASSWORD_DEFAULT);
13                     $query = "INSERT INTO users (name, username, password, email) VALUES ('$name', '$username', '$password', '$email')";
14                     if (mysqli_query($conn, $query)) {
15                         $_SESSION['username'] = $username;
16                         header('location:index.php');
17                     } else {
18                         $error = 'Error Registrasi Gagal : ' . mysqli_error($conn);
19                     }
20                 } else {
21                     $error = 'Username sudah terdaftar';
22                 }
23             } else {
24                 $error = 'Password tidak sama';
25             }
26         } else {
27             $error = 'Username dan Password tidak boleh kosong';
28         }
29     } else {
30         $error = 'Captcha salah';
31     }
32 }
```

Jika captcha yang diinput tidak sesuai dengan session captcha, maka menampilkan alert
“Captcha Salah”

Register

Captcha salah

Name

name

Username

Username

Email

email

Password

password

Re Password

repassword

Captcha

GX8SB

CAPTCHA

Sign Up

Sudah punya akun? [Login](#)

Login

Captcha salah

Username

Username

Password

password

Captcha

PE5LP

CAPTCHA

Sign In

Belum punya akun? [Daftar](#)

Jika Captcha benar, maka melanjutkan process login ataupun register

Companies

[Home](#) [Logout](#)

Halo, dummy

LOGIN OR REGISTER SUCCESSFULLY

CAPTCHA IS CORRECT



[PT Kereta Api Indonesia](#)

Kantor Pusat : Bandung

Satu-satunya operator perkeretaapian umum di Indonesia.



[PT Garuda Indonesia](#)

Kantor Pusat : Tangerang

PT Garuda Indonesia Tbk adalah maskapai penerbangan nasional Indonesia



[PT Bukaka Teknik Utama](#)

Kantor Pusat : Jakarta

Merupakan sebuah perusahaan multinasional yang bermarkas di Jakarta, Indonesia.



PT WIJAYA KARYA (Persero) Tbk.

[PT Wijaya Karya](#)

Kantor Pusat : Jakarta

Sebuah badan usaha milik negara Indonesia yang bergerak di bidang konstruksi.



PELAYARAN
NASIONAL
INDONESIA