

Rekayasa Web

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Database Driven Application Development

Rekayasa Web
Pertemuan 9

SIDU a.k.a VADE

- Buat tabel-tabel yang diperlukan
- Buat:
 - Select (View)
 - Insert (Add)
 - Delete
 - Update (Edit)

Untuk membantu membuat tabel-tabel

- <http://www.phpmyadmin.net>
- <http://www.sqlbuddy.com>
- <http://phpminiadmin.sourceforge.net/>

Contoh Sederhana (satu tabel)

- Guestbook
 - id UNSIGNED INT AUTOINCREMENT
 - nama VARCHAR(255)
 - pesan TEXT
 - waktu TIMESTAMP

Contoh 1

- PHP sederhana
- Buat View/Select
- Buat Add/Insert
- Buat Delete
- Buat Edit/Update



```
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
2 "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
3 <html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
4 <head>
5   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
6   <title>Guestbook - Lihat</title>
7 </head>
8 <body>
9 <?php
10   mysql_connect('localhost', 'rekweb', 'rekweb');
11   mysql_select_db('rekweb');
12   $query = mysql_query('SELECT * FROM `guestbook`');
13   while ($row = mysql_fetch_object($query)) {
14     echo "<div>";
15     echo "<strong>$row->nama</strong><br />";
16     echo "<span>$row->pesan</span><br />";
17     echo "<em>$row->waktu</em><br />";
18     echo "</div>";
19   }
20 ?>
21 </body>
22 </html>
```

Nico

Selamat pagi

2009-11-11 05:51:48

Riyono

Selamat pagi juga

2009-11-11 05:51:48

Andronicus

Pagi yang cerah

2009-11-11 05:52:06

```
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
2 "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
3 <html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
4 <head>
5   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
6   <title>Guestbook - Tambah</title>
7 </head>
8 <body>
9 <?php
10 if(!empty($_POST) && !empty($_POST['nama']) && !empty($_POST['pesan'])) {
11   mysql_connect('localhost', 'rekweb', 'rekweb');
12   mysql_select_db('rekweb');
13   mysql_unbuffered_query("INSERT INTO `guestbook` (`nama`, `pesan`)
14     VALUES (
15       '".mysql_escape_string($_POST['nama'])."',
16       '".mysql_escape_string($_POST['pesan'])."'
17     )");
18   header('Location: lihat.php');
19   exit;
20 }
21 ?>
22 <form action="" method="post">
23   <p><label>Nama<input type="text" name="nama" id="nama" /></label></p>
24   <p><label>Pesan<textarea name="pesan" id="pesan"></textarea></label></p>
25   <p><input type="submit" value="Tambahkan"></p>
26 </form>
27 </body>
28 </html>
```

Nama Nico

Pesan PHP memang OK!

Tambahkan

Nico

Selamat pagi

2009-11-11 05:51:48

Riyono

Selamat pagi juga

2009-11-11 05:51:48

Andronicus

Pagi yang cerah

2009-11-11 05:52:06

Nico

PHP memang OK!

2009-11-11 06:07:45

```

1 <?php
2 if(!empty($_GET) && !empty($_GET['id'])) {
3     mysql_connect('localhost', 'rekweb', 'rekweb');
4     mysql_select_db('rekweb');
5     mysql_unbuffered_query("DELETE FROM `guestbook`
6                             WHERE `id` = '".mysql_escape_string($_GET['id'])."'
7                             ");
8     header('Location: lihat.php');
9     exit;
10 }
```

```

1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
2 "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
3 <html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
4 <head>
5   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
6   <title>Guestbook - Lihat</title>
7 </head>
8 <body>
9   <a href="tambah.php">Tambahkan pesan di sini</a><br /><br />
10 <?php
11   mysql_connect('localhost', 'rekweb', 'rekweb');
12   mysql_select_db('rekweb');
13   $query = mysql_query('SELECT * FROM `guestbook`');
14   while ($row = mysql_fetch_object($query)) {
15     echo "<div>";
16     echo "<strong>$row->nama</strong>";
17     echo ' <a href="hapus.php?id='.$row->id.'">hapus</a><br />';
18     echo "<span>$row->pesan</span><br />";
19     echo "<em>$row->waktu</em><br /><br />";
20     echo "</div>";
21   }
22 ?>
23 </body>
24 </html>

```

[Tambahkan pesan di sini](#)

Nico [hapus](#)

Selamat pagi

2009-11-11 05:51:48

Riyono [hapus](#)

Selamat pagi juga

2009-11-11 05:51:48

Andronicus [hapus](#)

Pagi yang cerah

2009-11-11 05:52:06

[Tambahkan pesan di sini](#)

Andronicus [hapus](#)

Pagi yang cerah

2009-11-11 05:52:06

Nico [hapus](#)

PHP memang OK!

2009-11-11 06:07:45

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN
2 "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
3 <html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
4 <head>
5   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
6   <title>Guestbook - Edit</title>
7 </head>
8 <body>
9 <?php
10 if(empty($_GET['id'])) {
11   header('Location: lihat.php');
12   exit;
13 }
14 mysql_connect('localhost', 'rekweb', 'rekweb');
15 mysql_select_db('rekweb');
16 if(!empty($_POST['id']) && !empty($_POST['nama']) && !empty($_POST['pesan']))
17 {
18   mysql_unbuffered_query("UPDATE `guestbook`
19     SET
20       `nama`='".mysql_escape_string($_POST['nama'])."',
21       `pesan`='".mysql_escape_string($_POST['pesan'])."'
22     WHERE `id`='".mysql_escape_string($_POST['id'])."'
23     ");
24   header('Location: lihat.php');
25   exit;
26 }
27 $row = mysql_fetch_object(mysql_query("SELECT * FROM guestbook WHERE `id`='".
28   mysql_escape_string($_GET['id'])."'"));
29 ?>
30 <form action="edit.php?id=<?php echo $_GET['id']; ?>" method="post">
31   <p><label>Nama<input type="text" name="nama" id="nama" value="<?php echo $row->nama ?>" /></label></p>
32   <p><label>Pesan<textarea name="pesan" id="pesan"><?php echo $row->pesan ?></textarea></label></p>
33   <p>
34     <input type="hidden" name="id" value="<?php echo $row->id ?>" id="id">
35     <input type="submit" value="Simpan">
36   </p>
```

```

1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
2 "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
3 <html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
4 <head>
5   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
6   <title>Guestbook - Lihat</title>
7 </head>
8 <body>
9   <a href="tambah.php">Tambahkan pesan di sini</a><br /><br />
10 <?php
11   mysql_connect('localhost', 'rekweb', 'rekweb');
12   mysql_select_db('rekweb');
13   $query = mysql_query('SELECT * FROM `guestbook`');
14   while ($row = mysql_fetch_object($query)) {
15     echo "<div>";
16     echo "<strong>$row->nama</strong>";
17     echo ' <a href="edit.php?id='.$row->id.'">edit</a> |
18         <a href="hapus.php?id='.$row->id.'">hapus</a><br />';
19     echo "<span>$row->pesan</span><br />";
20     echo "<em>$row->waktu</em><br /><br />";
21     echo "</div>";
22   }
23 ?>
24 </body>
25 </html>

```

Nama Nico

Pesan Pagi yang ceria

Simpan

[Tambahkan pesan di sini](#)

Nico [edit](#) | [hapus](#)

Pagi yang ceria

2009-11-11 06:30:08

Nico [edit](#) | [hapus](#)

PHP memang OK!

2009-11-11 06:07:45

Keuntungan Langkah SIDU

- Progress segera dapat dilihat
- Urutan logis
 - menampilkan apa yang sudah dirancang
 - menambahkan sesuatu
 - menghapus dari yang sudah ada
 - mengubah yang sudah ada

Dengan CodeIgniter

- Controller Guestbook
 - Methods:
 - index (view)
 - tambah
 - hapus
 - edit

```
2
3 class Guestbook extends Controller {
4
5     function Guestbook()
6     {
7         parent::Controller();
8     }
9
10    function index()
11    {
12        $data = array();
13        $data['messages'] = $this->db->get('guestbook')->result();
14        $this->load->view('guestbook/lihat', $data);
15    }
16
17    function tambah()
18    {
19        if(!empty($_POST) && !empty($_POST['nama']) && !empty($_POST['pesan'])) {
20            $this->db->insert('guestbook', $_POST);
21            redirect('guestbook');
22            exit;
23        }
24        $this->load->view('guestbook/tambah');
25    }
26
27    function hapus($id) {
28        $this->db->delete('guestbook', array('id'=>$id));
29        redirect('guestbook');
```

```
18 {
19     if(!empty($_POST) && !empty($_POST['nama']) && !empty($_POST['pesan'])) {
20         $this->db->insert('guestbook', $_POST);
21         redirect('guestbook');
22         exit;
23     }
24     $this->load->view('guestbook/tambah');
25 }
26
27 function hapus($id) {
28     $this->db->delete('guestbook', array('id'=>$id));
29     redirect('guestbook');
30     exit;
31 }
32
33 function edit($id) {
34     if(!empty($_POST['id']) && !empty($_POST['nama']) && !empty($_POST['pesan'])) {
35         $this->db->update('guestbook', $_POST, array('id'=>$_POST['id']));
36         redirect('guestbook');
37         exit;
38     }
39     $data = array();
40     $data['message'] = $this->db->get_where('guestbook', array('id'=>$id))->row();
41     $this->load->view('guestbook/edit', $data);
42 }
43
44 }
45
46 /* End of file guestbook.php */
47 /* Location: ./system/application/controllers/guestbook.php */
```

● guestbook.php ● edit.php ✖ tambah.php ✖ config.php ✖ database.php ● lihat.php

```
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
2 "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
3 <html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
4 <head>
5   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
6   <title>Guestbook - Lihat</title>
7 </head>
8 <body>
9   <a href="<?php echo site_url('guestbook/tambah') ?>">
10     Tambahkan pesan di sini</a><br /><br />
11 <?php foreach ($messages as $message): ?>
12 <div>
13   <strong><?php echo $message->nama; ?></strong>
14   <a href="<?php echo site_url('guestbook/edit/' . $message->id) ?>">edit</a>
15   | <a href="<?php echo site_url('guestbook/hapus/' . $message->id) ?>">hapus</a><br />
16   <p><?php echo $message->pesan; ?></p>
17   <em><?php echo $message->waktu; ?></em><br /><br />
18 </div>
19 <?php endforeach; ?>
20 </body>
21 </html>
```

● guestbook.php ● edit.php ✖ tambah.php ✖ config.php ✖ database.php ● lihat.php

```
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
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3 <html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
4 <head>
5   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
6   <title>Guestbook - Tambah</title>
7 </head>
8 <body>
9 <form action="" method="post">
10   <p><label>Nama<input type="text" name="nama" id="nama" /></label></p>
11   <p><label>Pesan<textarea name="pesan" id="pesan"></textarea></label></p>
12   <p><input type="submit" value="Tambahkan"></p>
13 </form>
14 </body>
15 </html>
```

● guestbook.php ● edit.php ✖ tambah.php ✖ config.php ✖ database.php ✖ lihat.php

```
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
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3 <html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
4 <head>
5   <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
6   <title>Guestbook - Edit</title>
7 </head>
8 <body>
9 <form action="" method="post">
10   <p><label>Nama<input type="text" name="nama" id="nama"
11     value="<?php echo $message->nama ?>" /></label></p>
12   <p><label>Pesan<textarea name="pesan" id="pesan"><?php
13     echo $message->pesan ?></textarea></label></p>
14   <p>
15     <input type="hidden" name="id" value="<?php echo $message->id ?>" id="id">
16     <input type="submit" value="Simpan">
17   </p>
18 </form>
19 </body>
20 </html>
```

Jangan pernah percaya

- Apapun yang diinputkan user
- Mengapa?
 - User awam atau keliru
 - User sengaja memanipulasi input

Perlunya validasi data

- Memastikan data yang diisikan lengkap
 - Misal: mewajibkan mengisi password
- Memastikan data yang diisikan benar
 - Misal: email, tanggal lahir, nomor telpon

Perlunya membersihkan data input

- Memastikan tidak ada data yang dapat merusak atau mengacaukan sistem
- Contoh:
 - Javascript

```
<script type="text/  
javascript">window.location = "http://  
www.google.com/"</script>
```