

NAMA : WA ODE SASKIA
PRODI : S1 TEKNOLOGI INFORMASI
MATKUL : PBO

INPUTNYA

C: > xampp3 > htdocs > tugas > indexbetul.php

```
1  <?php
2  session_start();
3
4  /* =====
5  |   Modul 1: Pengenalan PBO
6  |   ===== */
7  function e($str){
8  |   return htmlspecialchars($str, ENT_QUOTES, 'UTF-8');
9  }
10
11 function alert($msg){
12 |   echo "<script>alert('$msg')</script>";
13 }
14
15 /* =====
16 |   Modul 2: Dasar PBO PHP
17 |   ===== */
18 const PRODI = [
19 |   "S1 Teknologi Informasi",
20 |   "D3 Kebidanan",
21 |   "S1 Adminkes",
22 |   "S1 Gizi"
23 ];
24
25 /* =====
26 |   Modul 3: Inheritance
27 |   ===== */
28 class BaseModel {
29 |   protected $db;
30
31 |   public function __construct($db){
32 |       $this->db = $db;
```

```

34 }
35
36 /* =====
37 | Modul 4: Modifier
38 | ===== */
39 class Database {
40     private $conn;
41
42     public function __construct(){
43         try {
44             $this->conn = new PDO('sqlite:data.db');
45             $this->conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
46
47             $this->conn->exec("
48                 CREATE TABLE IF NOT EXISTS mahasiswa(
49                     id INTEGER PRIMARY KEY AUTOINCREMENT,
50                     nama TEXT,
51                     nim TEXT,
52                     prodi TEXT
53                 )
54             ");
55         } catch(Exception $e){
56             die($e->getMessage());
57         }
58     }
59
60     public function getConn(){
61         return $this->conn;
62     }
63 }

```

```

65  /* =====
66  | Modul 5: Enkapsulasi
67  ===== */
68  trait Validasi {
69      private function validasi($nama,$nim){
70          if(empty($nama) || empty($nim)){
71              throw new Exception("Data tidak boleh kosong");
72          }
73          if(strlen($nim) != 8){
74              throw new Exception("NIM harus 8 digit");
75          }
76      }
77  }
78
79  /* =====
80  | Modul 6: Polimorfisme
81  ===== */
82  interface Info {
83      public function info();
84  }
85
86  /* =====
87  | Modul 7: Abstraksi
88  ===== */
89  abstract class ModelAbstract extends BaseModel implements Info {
90      abstract public function getAll();
91  }
92
93  /* =====
94  | Modul 8: Namespace & Autoload
95  ===== */

```

```

96 spl_autoload_register(function($class){
97     // sederhana (1 file)
98 });
99
100 /* =====
101 | Modul 9: Exception
102 ===== */
103
104 /* =====
105 | Modul 10: Advanced OOP
106 ===== */
107 class Mahasiswa extends ModelAbstract {
108     use Validasi;
109
110     public function info(){
111         return "Model Mahasiswa";}
112
113     public function tambah($nama,$nim,$prodi){
114         $this->validasi($nama,$nim);
115         $stmt = $this->db->prepare("INSERT INTO mahasiswa(nama,nim,prodi) VALUES(?,?,?)");
116         $stmt->execute([$nama,$nim,$prodi]); }
117
118     public function getAll(){
119         return $this->db->query("SELECT * FROM mahasiswa ORDER BY id DESC"); }
120
121     public function getById($id){
122         $stmt = $this->db->prepare("SELECT * FROM mahasiswa WHERE id=?");
123         $stmt->execute([$id]);
124         return $stmt->fetch(PDO::FETCH_ASSOC); }
125
126     public function update($id,$nama,$nim,$prodi){
127         $this->validasi($nama,$nim):
128
129         $stmt = $this->db->prepare("UPDATE mahasiswa SET nama=?,nim=?,prodi=? WHERE id=?");
130         $stmt->execute([$nama,$nim,$prodi,$id]);}
131
132     public function delete($id){
133         $stmt = $this->db->prepare("DELETE FROM mahasiswa WHERE id=?");
134         $stmt->execute([$id]);}
135 }
136
137 /* =====
138 | Modul 11: CRUD
139 ===== */
140 $db = new Database();
141 $mhs = new Mahasiswa($db->getConn());
142
143 $USER = "admin";
144 $PASS = "123";
145
146 if(isset($_POST['login'])){
147     if($_POST['username']===$USER && $_POST['password']===$PASS){
148         $_SESSION['login'] = true;
149     } else {
150         alert("Login gagal!");
151     }
152 }
153
154 if(isset($_GET['logout'])){
155     session_destroy();
156     header("Location: index.php");
157     exit;

```

```

157 }
158
159 try {
160     if(isset($_POST['simpan'])){
161         if(empty($_POST['id'])){
162             $mhs->tambah($_POST['nama'],$_POST['nim'],$_POST['prodi']);
163         } else {
164             $mhs->update($_POST['id'],$_POST['nama'],$_POST['nim'],$_POST['prodi']);
165         }
166     }
167
168     if(isset($_GET['hapus'])){
169         $mhs->delete($_GET['hapus']);
170     }
171
172 } catch(Exception $e){
173     alert($e->getMessage());}
174
175 /* =====
176 | Modul 12: Proyek Akhir
177 ===== */
178 $edit = isset($_GET['edit']) ? $mhs->getById($_GET['edit']) : null;
179 $data = $mhs->getAll();
180 ?>
181
182 <!DOCTYPE html>
183 <html>
184 <head>
185 <title>Sistem Kampus OOP</title>
186
187 <style>

```

```
188 body { font-family: Arial; background: #fff6f8; }
189 .container { width: 80%; margin: auto; text-align: center; }
190 .card {
191     background: white; padding: 20px;
192     border-radius: 12px; margin-top: 20px;
193     box-shadow: 0 3px 10px rgba(0,0,0,0.08);}
194
195 form {
196     display: flex;
197     flex-wrap: wrap;
198     justify-content: center;
199     gap: 10px;}
200
201 input, select {
202     padding: 10px; width: 200px;
203     border-radius: 6px;
204     border: 1px solid #ddd;}
205
206 button {
207     background: #f8a5c2; color: white;
208     border: none; padding: 10px 18px;
209     border-radius: 6px; cursor: pointer;}
210
211 button:hover { background: #f78fb3; }
212 table {
213     width: 100%; margin-top: 20px;
214     border-collapse: collapse;}
215
216 th { background: #f8a5c2; color: white; }
217 td, th { padding: 10px; border: 1px solid #eee; }
218 a { color: #e84393; text-decoration: none; }
219 </style>
```

```
220 </head>
221
222 <body>
223 <div class="container">
224
225 <?php if(!isset($_SESSION['login'])): ?>
226
227 <div class="card">
228 <h2>Login Admin</h2>
229 <form method="post">
230 <input name="username" placeholder="Username">
231 <input type="password" name="password" placeholder="Password">
232 <button name="login">Login</button>
233 </form>
234 </div>
235
236 <?php else: ?>
237
238 <div class="card">
239 <h2>Sistem Informasi Mahasiswa</h2>
240
241 <form method="post">
242 <input type="hidden" name="id" value="<?= $edit['id'] ?? '' ?>">
243 <input name="nama" placeholder="Nama" value="<?= e($edit['nama'] ?? '') ?>">
244 <input name="nim" placeholder="NIM" value="<?= e($edit['nim'] ?? '') ?>">
245
246 <select name="prodi">
247 <?php foreach(PRODI as $p): ?>
248 <option <?= (isset($edit['prodi']) && $edit['prodi']==$p) ? 'selected':'' ?>>
249 <?= $p ?>
250 </option>
```

```
251 <?php endforeach; ?>
252 </select>
253
254 <button name="simpan"><?php echo $edit ? "Update":"Simpan" ?></button>
255 </form>
256
257 <table>
258 <tr>
259 <th>Nama</th>
260 <th>NIM</th>
261 <th>Prodi</th>
262 <th>Aksi</th>
263 </tr>
264
265 <?php foreach($data as $d): ?>
266 <tr>
267 <td><?php echo $d['nama'] ?></td>
268 <td><?php echo $d['nim'] ?></td>
269 <td><?php echo $d['prodi'] ?></td>
270 <td>
271 <a href="?edit=<?php echo $d['id'] ?>">Edit</a> |
272 <a href="?hapus=<?php echo $d['id'] ?>" onclick="return confirm('Hapus?')">Hapus</a>
273 </td>
274 </tr>
275 <?php endforeach; ?>
276 </table>
277
278 <br>
279 <a href="?logout=true">Logout</a>
280 </div>
281
282 <?php endif; ?>
```

283

284 </div>

285 </body>

286 </html>

OUTPUTNYA



Login Admin

admin

Login

Sistem Informasi Mahasiswa

Nama NIM S1 Teknologi Informasi

Nama	NIM	Prodi	Aksi
anggun	87654321	D3 Kebidanan	Edit Hapus
saskia	20242010	S1 Teknologi Informasi	Edit Hapus

Logout