PEMROGRAMAN BERORIENTASI OBJEK
LAPORAN PRAKTIKUM 4

Ditulis Dalam Rangka Pemenuhan Tugas Mata Kuliah Pemrograman Berorientasi Objek

,

Dosen Pengampu

Andi Irwan Nurhidyat, S.Kom., M.T.
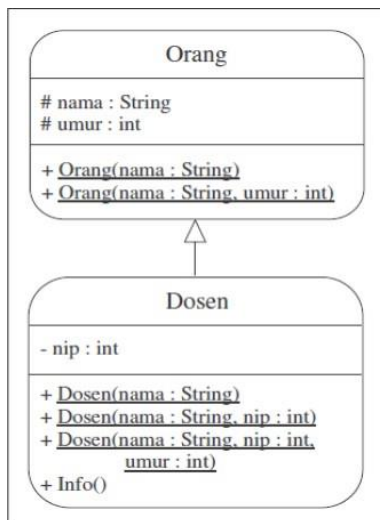NIP 197810272008121002

Disusun Oleh :

Aditya Ramadhan Wahyu Santoso (21091397055)
adityaramadhan.21055@mhs.unesa.ac.id

PROGRAM STUDI MANAJEMEN INFORMATIKA
FAKULTAS VOKASI
UNIVERSITAS NEGERI SURABAYA
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1. Buat program berdasarkan UML berikut

Source Code

```php
1   <!DOCTYPE html>
2   <html lang="id">
3   <head>
4       <link rel="stylesheet" type="text/css" href="no1.css">
5       <title>Praktikum 4</title>
6   </head>
7   <body>
8   <div class="container">
9   <h2>Soal 1</h2>
10
11
12  <?php
13
14      class Orang {
15          protected $nama,$umur;
16          public function __construct($nama,$umur){
17          $this->nama = $nama;
18          $this->umur = $umur;
19          }
20      }
21
22      class Dosen extends Orang   {
```

```php
22      class Dosen extends Orang   {
23          private $nip;
24          public function __construct($nama, $umur, $nip) {
25              $this->nip = $nip;
26              parent::__construct($nama, $umur);
27          }
28
29          public function hasil() {
30              return $this->nama . ' , umur ' . $this->umur. ' , NIP ' . $this->nip;
31          }
32      }
33
34      $dosen1 = new Dosen('Aditya', 28, 24021397303);
35      $dosen2 = new Dosen('Wahyu', 35, 24021397307);
36      $dosen3 = new Dosen('Santoso', 33, 24021397309);
37
38      echo $dosen1->hasil();
39          echo '<br> <br>';
40      echo $dosen2->hasil();
41          echo '<br> <br>';
42      echo $dosen3->hasil();
43          echo '<br> <br>';
```

```
no1.php > html > body > div.container
30              return $this->nama . ' , umur ' . $this->umur. ' , NIP ' . $this->nip;
31          }
32      }
33
34      $dosen1 = new Dosen('Aditya', 28, 24021397303);
35      $dosen2 = new Dosen('Wahyu', 35, 24021397307);
36      $dosen3 = new Dosen('Santoso', 33, 24021397309);
37
38      echo $dosen1->hasil();
39          echo '<br> <br>';
40      echo $dosen2->hasil();
41          echo '<br> <br>';
42      echo $dosen3->hasil();
43          echo '<br> <br>';
44
45  ?>
46
47  </div>
48  </body>
49  </html>
```

```
# no1.css > .container
1   body {
2       align-items: center;
3       background-color: ■cornsilk;
4   }
5   h2 {
6       text-align: center;
7   }
8
9   .container {
10      margin: auto;
11      text-align: center;
12      height: 180px;
13      width: 350px;
14      border-style: groove;
15  }
```

Output

2. Buat program berdasarkan UML berikut

RerataNilai
+ int average(int, int)
+ double average(double, double)
+ int average(int, int, int)

Source Code

```php
<?php

class RerataNilai {
    protected $value, $value2;
    public function __construct($value, $value2){
        $this->value = $value;
        $this->value2 = $value2;
    }
    public function average($value3 = 0){
        if ($value3 == 0) {
            $str = $this->value . ' + ' . $this->value2 . ' / 2 = ';
            return $str . ($this->value += $this->value2 ) / 2;

        } else {
            $str ='(' . $this->value . ' + ' . $this->value2 . ' + ' . $this->value2 . ') / 3 = ';
            return $str . ($this->value += $this->value2 += $value3 ) / 3;
        }
    }
}
class RerataNilai2 extends RerataNilai{
    public function __construct($value, $value2){
        parent::__construct($value, $value2);
    }

    public function average($value3 = 0){
        return parent::average($value3);
    }
}
?>
```

```php
<?php
    require_once 'no2(2).php';
?>

<html lang="id">
<head>
    <link rel="stylesheet" href="no2.css">
    <title>Praktikum 4</title>
</head>
<body>
<div class="container">
<h2>Nomor 2</h2>
<div class="form">
    <form action="" method="post">
            <input type="number" name="input1">
            <input type="number" name="input2">
            <input type="number" name="input3">
            <button type="submit" name="submit">Submit</button>
        </form>
    </div>

        <?php
            if (isset($_POST['submit']))    {
                if (!$_POST['input3'])  {
                    $value1 = new RerataNilai2($_POST['input1'], $_POST['input2']);
                    echo $value1->average(0);
                } else  {
                    $value1 = new RerataNilai2($_POST['input1'], $_POST['input2']);
                    echo $value1->average($_POST['input3']);
                }
            }
        ?>
    </div>
```

```php
no2.php > ...
 4
 5    <html lang="id">
 6    <head>
 7        <link rel="stylesheet" href="no2.css">
 8        <title>Praktikum 4</title>
 9    </head>
10    <body>
11    <div class="container">
12    <h2>Nomor 2</h2>
13    <div class="form">
14        <form action="" method="post">
15                <input type="number" name="input1">
16                <input type="number" name="input2">
17                <input type="number" name="input3">
18                <button type="submit" name="submit">Submit</button>
19            </form>
20        </div>
21
22        <?php
23            if (isset($_POST['submit']))    {
24                    if (!$_POST['input3']) {
25                        $value1 = new RerataNilai2($_POST['input1'], $_POST['input2']);
26                        echo $value1->average(0);
27                    } else  {
28                        $value1 = new RerataNilai2($_POST['input1'], $_POST['input2']);
29                        echo $value1->average($_POST['input3']);
30                        }
31                }
32            ?>
33    </div>
34    </body>
35    </html>
```

```css
# no2.css > .container
1    .container {
2        margin: auto;
3        text-align: center;
4        width: 650px;
5        height: 150px;
6        border-style: cornsilk;
7    }
```

Output

localhost/adityarws/php/praktikum_4/no2.php

Nomor 2

[   ] [   ] [   ] Submit

(50 + 50 + 50) / 3 = 50

3. Buat program berdasarkan UML berikut

Katak
umur : int
nama : String
+ Katak(int, String)
+ String caraBergerak()

Kecebong
panjangEkor : double
+ Kecebong(int, String, double)

Dan buat objek dengan karakteristik seperti tabel dibawah ini

Obyek	umur	nama	panjangEkor	caraBergerak
O1	5	Froggy		melompat
O2	2	Junior Frog	10	berenang

Source Code

```php
1   <?php
2
3   class Katak{
4       protected $umur, $nama;
5       public function __construct($umur, $nama){
6           $this->umur = $umur;
7           $this->nama = $nama;
8       }
9       public function getUmur(){
10          return $this->umur;
11      }
12      public function getNama(){
13          return $this->nama;
14      }
15      public function caraBergerak(){
16          return 'Melompat';
17      }
18  }
19
20  class Kecebong extends Katak{
21      private $panjangEkor;
22      public function __construct($umur, $nama, $ekor){
23      $this->panjangEkor = $ekor;
24      parent::__construct($umur, $nama);
25      }
26      public function getpanjangekor(){
27          return $this->panjangEkor;
28      }
29      public function carabergerak(){
30          return 'Berenang';
31      }
32  }
```

```php
17      }
18  }
19
20  class Kecebong extends Katak{
21      private $panjangEkor;
22      public function __construct($umur, $nama, $ekor){
23      $this->panjangEkor = $ekor;
24      parent::__construct($umur, $nama);
25      }
26      public function getpanjangekor(){
27          return $this->panjangEkor;
28      }
29      public function carabergerak(){
30          return 'Berenang';
31      }
32  }
33
34  $katak = new katak(5, 'Froggy');
35  $kecebong = new kecebong(5, 'Junior Froggy', 10);
36
37  ?>
```

```php
1   <?php
2       require_once 'no3(2).php';
3   ?>
4
5   <html lang="id">
6   <head>
7       <link rel="stylesheet" type="text/css" href="no3.css">
8       <title>Praktikum 4</title>
9   </head>
10  <body>
11  <h2><center>Nomor 3</center></h2>
12  <table align="center">
13
14  <tr align="center" bgcolor="e3d268">
15      <td>Objek</td>
16      <td>Umur</td>
17      <td>Nama</td>
18      <td>Panjang Ekor</td>
19      <td>Cara Bergerak</td>
20  </tr>
21
22  <tr>
23      <td>01</td>
24      <td><?=$katak->getUmur() ?> </td>
25      <td><?=$katak->getnama() ?> </td>
26      <td>-</td>
27      <td><?=$katak->carabergerak() ?> </td>
28  </tr>
29
30  <tr>
31      <td>02</td>
32      <td><?=$kecebong->getUmur() ?></td>
33      <td><?=$kecebong->getNama() ?></td>
```

```php
19      <td>Cara Bergerak</td>
20  </tr>
21
22  <tr>
23      <td>01</td>
24      <td><?=$katak->getUmur() ?> </td>
25      <td><?=$katak->getnama() ?> </td>
26      <td>-</td>
27      <td><?=$katak->carabergerak() ?> </td>
28  </tr>
29
30  <tr>
31      <td>02</td>
32      <td><?=$kecebong->getUmur() ?></td>
33      <td><?=$kecebong->getNama() ?></td>
34      <td><?=$kecebong->getpanjangekor() ?></td>
35      <td><?=$kecebong->carabergerak() ?></td>
36  </tr>
37
38  </table>
39  </body>
40  </html>
```

```css
# no3.css > .table
1  h2{
2      margin: auto;
3      text-align: center;
4      padding-bottom: 10px;
5  }
6
7  .table{
8      margin: auto;
9      font-family: sans-serif;
10     border-collapse: collapse;
11 }
12
13 .table, td{
14     border: 1px solid;
15     padding: 8px 10px;
16 }
```

Output

localhost/adityarws/php/praktikum_4/no3.php

Nomor 3

Objek	Umur	Nama	Panjang Ekor	Cara Bergerak
01	5	Froggy	-	Melompat
02	5	Junior Froggy	10	Berenang