

LAPORAN PRAKTIKUM 5



Oleh:

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PROGRAM STUDI D4 MANAJEMEN INFORMATIKA

FAKULTAS VOKASI

UNIVERSITAS NEGERI SURABAYA

2022

1. Buatlah Program berdasarkan UML dibawah ini

Codingan

- PHP

```
File Edit Selection View Go Run Terminal Help
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More
Nomor1 Prak5.php X Nomor2 Prak5.php
C: > Xampp > htdocs > PBO > Prak 5 > Nomor1 Prak5.php
1 <!-- Nama : Nur Haslinda
2 NIM : 21091397035
3 Kelas : 2021 A-->
4
5
6 <!DOCTYPE html>
7 <html lang="id">
8 <head>
9 <meta charset="UTF-8">
10 <meta http-equiv="X-UA-Compatible" content="IE=edge">
11 <meta name="viewport" content="width=device-width, initial-scale=1.0">
12 <title>Praktikum 5</title>
13 </head>
14 <body style="align-items: center;">
15 <div class="container">
16 <h2>Soal 1</h2>
17
18 <?php
19 class Pegawai
20 {
21     public $nama;
22     public function __construct($nama)
23     {
24         $this->nama = $nama;
25     }
26     public function getNama()
27     {
28         return $this->nama;
29     }
30 }
```

```
31 class Manajer extends Pegawai
32 {
33     public $tunjangan;
34     public function __construct($nama, $tunjangan)
35     {
36         parent::__construct($nama);
37         $this->tunjangan = $tunjangan;
38     }
39     public function getTunjangan()
40     {
41         return $this->tunjangan;
42     }
43 }
44 class Kurir extends Pegawai
45 {
46     public $gaji;
47
48     public function __construct($nama, $gaji)
49     {
50         parent::__construct($nama);
51         $this->gaji = $gaji;
52     }
53
54     public function getGaji()
55     {
56         return $this->gaji;
57     }
58 }
59 }
```

```

60 class Soal1
61 {
62     public static
63     function Proses($peg)
64     {
65         if ($peg instanceof Manajer)
66         {
67             $man = $peg;
68             echo "<br>Nama manajer: ".$man->nama, "\n";
69             echo "<br>Tunjangan: Rp. ".strval($man->tunjangan), "\n";
70         }
71         else if ($peg instanceof Kurir)
72         {
73             $kur = $peg;
74             echo "<br>Nama kurir: ".$kur->nama, "\n";
75             echo "<br>Gaji: Rp. ".strval($kur->gaji), "\n";
76         }
77     }
78     public static
79     function main($args)
80     {
81         echo "Nur Haslinda_21091397035", "\n";
82         echo "<br>", "<br>";
83         $peg1 = new Manajer("Linda", 10000000);
84         Soal1::Proses($peg1);
85         echo "<br>", "<br>";
86         $peg2 = new Kurir("Bagus", 4000000);
87         Soal1::Proses($peg2);
88     }
89 }

90 Soal1::main(array());
91 ?>
92 
93 </div>
94 </body>
95 </html>

```

- Output

Soal 1

Nur Haslinda_21091397035

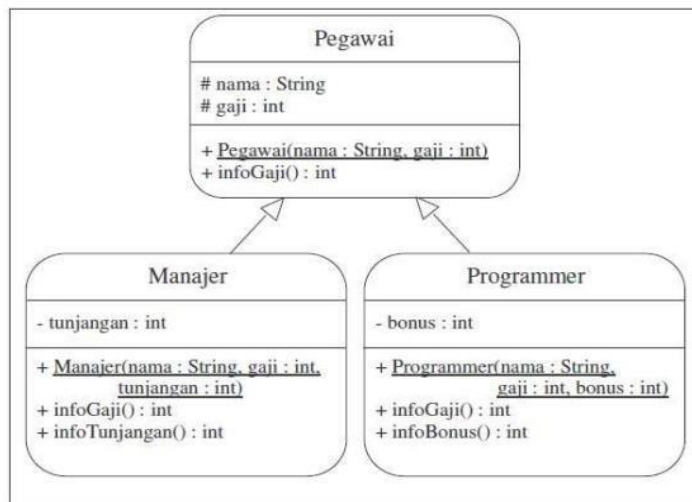
Nama manajer: Linda
Tunjangan: Rp. 10000000

Nama kurir: Bagus
Gaji: Rp. 4000000

- Analisa

Dalam kasus diatas implementasi dari polymorphic argument berada di class info dimana methodinfo dibuat static supaya pemanggilannya tidak perlu diinisiasi, sehingga bisa langsung dimasukkan menjadi parameter pada method info di class info.

2. Buatlah Program berdasarkan UML dibawah ini



Codingan

- PHP

```
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Nomor1 Prak5.php Nomor2 Prak5.php X
C: > Xampp > htdocs > PBO > Prak 5 > Nomor2 Prak5.php
1 <!-- Nama : Nur Haslinda
2 NIM : 21091397035
3 Kelas : 2021 A-->
4
5 <!DOCTYPE html>
6 <html lang="id">
7 <head>
8 <meta charset="UTF-8">
9 <meta http-equiv="X-UA-Compatible" content="IE=edge">
10 <meta name="viewport" content="width=device-width, initial-scale=1.0">
11 <title>Praktikum 5</title>
12 </head>
13 <body>
14 <div class="container">
15 <h2>Soal 2</h2>
16
17 <?php
18 class Pegawai
19 {
20     public $nama;
21     public $gaji;
22     public function __construct($nama, $gaji)
23     {
24         $this->nama = $nama;
25         $this->gaji = $gaji;
26     }
27     public function infoGaji()
28     {
29         return $this->gaji;
30     }
31 }
```

```

32 class Manajer extends Pegawai
33 {
34     private $tunjangan;
35     public function __construct($nama, $gaji, $tunjangan)
36     {
37         parent::__construct($nama, $gaji);
38         $this->tunjangan = $tunjangan;
39     }
40     public function infoGaji()
41     {
42         return $this->gaji;
43     }
44     public function infoTunjangan()
45     {
46         return $this->tunjangan;
47     }
48 }
49 class Programmer extends Pegawai
50 {
51     private $bonus;
52     public function __construct($nama, $gaji, $bonus)
53     {
54         parent::__construct($nama, $gaji);
55         $this->bonus = $bonus;
56     }
57     public function infoGaji()
58     {
59         return $this->gaji;
60     }
61     public function infoBonus()
62     {
63         return $this->bonus;
64     }
65 }

```

```

66 class Bayaran
67 {
68     public function hitungBayaran($peg)
69     {
70         $uang = $peg->infoGaji();
71         return $uang;
72     }
73 }
74 public static function main($args)
75 {
76     echo "Nur Haslinda_21091397035","\n";
77     $man = new Manajer("Linda", 10000000, 500000);
78     echo "<br>", "<br>";
79     $prog = new Programmer("Nur", 8000000, 300000);
80     echo "<br>", "<br>";
81     $hr = new Bayaran();
82     echo "<br> Gaji untuk Manajer Bernama ". $man->nama. " : Rp. ".strval($hr->hitungBayaran($man)) , "\n";
83     echo "<br>", "<br>";
84     echo "<br>Gaji untuk Programmer Bernama ". $prog->nama. " : Rp. ".strval($hr->hitungBayaran($prog)) , "\n";
85 }
86 }
87 }
88 Bayaran::main(array());
89 ?>
90 <!-- END PHP -->
91 </div>
92 </body>
93 </html>

```

- Output

Soal 2

Nur Haslinda_21091397035

Gaji untuk Manajer Bernama Linda : Rp. 10000000

Gaji untuk Programmer Bernama Nur : Rp. 8000000

- Analisa

Program diatas adalah penerapan inheritance dengan konsep overriding, dimana pemanggilan construct di masing-masing class turunan hanya akan menginisiasi properti yang dimiliki dengan visibilitas private dan properti lain yang diturunkan akan langsung diinisiasi dengan construct dari parentnya.