Pengembangan Aplikasi *Web*

Pertemuan Ke-5
(PHP: Lanjut 3)

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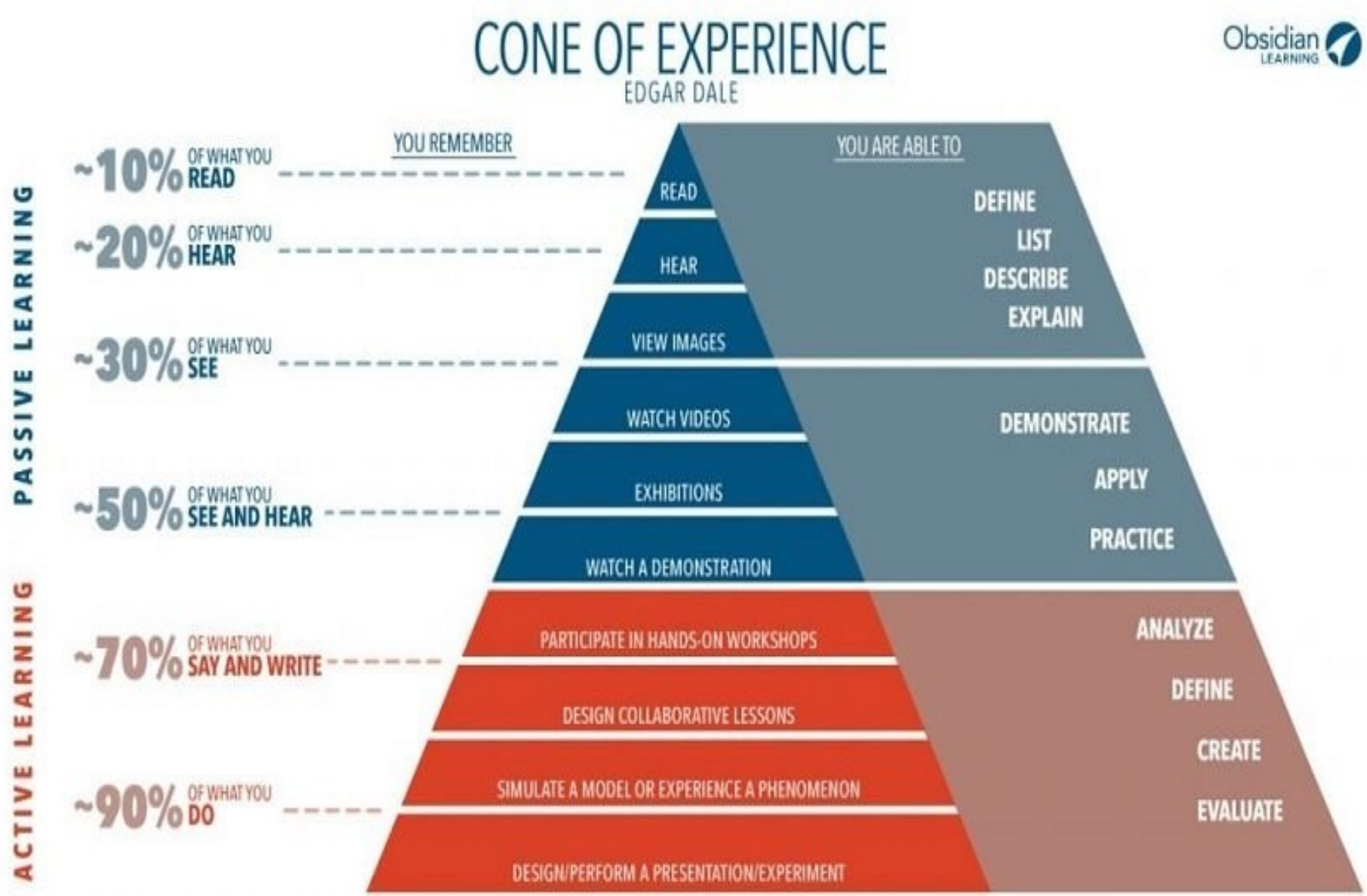
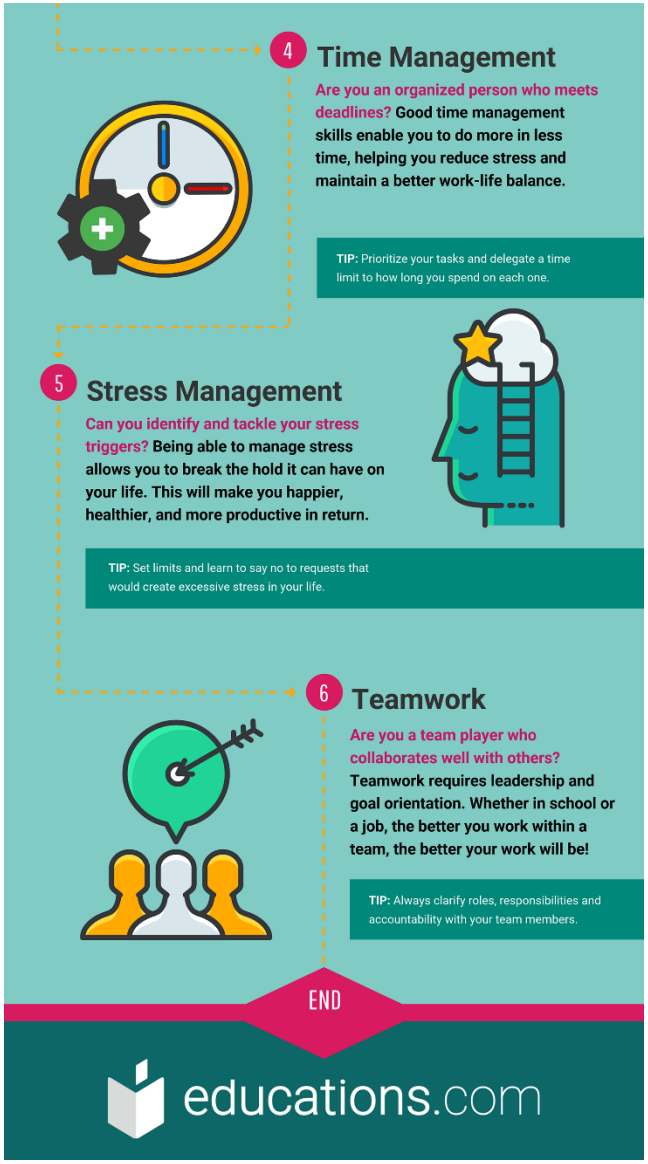
Semester Gasal 2023/2024
S1 Teknik Informatika – Universitas Trunojoyo Madura (UTM)



https://elearningindustry.com/



https://id.educations.com/articles-and-advice/soft-skills-you-need-to-get-ahead-14193

You won't always be a priority to others,
and that's why you have to be a priority to yourself.

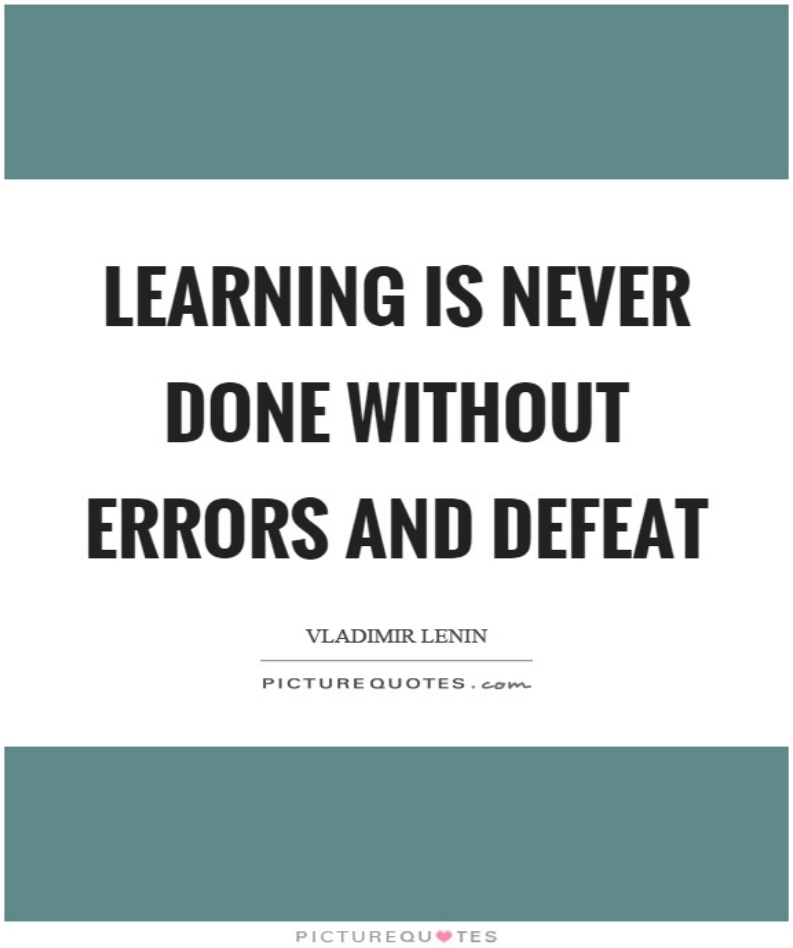
Learn to respect yourself, take care of yourself,
and become your own support system.

Your needs matter. Start meeting them. Don't wait
for others to choose you. Choose yourself.

Jazz Zo Marcellus

Tabu Bagi Mahasiswa Teknik Informatika

- Tidak dapat beradaptasi dengan (perkembangan) teknologi
- Tidak dapat membaca atau memahami instruksi
- Tidak dapat membuat program



Sub Pokok Bahasan

- Fungsi
- Variabel dalam Fungsi
- Include
- PBO

Fungsi (*Function*): *User Defined*

http://php.net/manual/en/functions.user-defined.php

```
function namaFungsi() {
   // operasi yang akan dilakukan
}
```

```
<?php
function addNumber($value1, $value2)
{
        $total = $value1 + $value2;
        return $total;
}

echo "2 + 1 = ". addNumber(1,2);
?>
```

- **NOTE:**
  - Nama fungsi adalah *case-insensitive*
  - Nama variabel adalah *case-sensitive*

Challenge #1

Buatlah **fungsi** untuk mencetak teks dengan penomoran terurut ke bawah seperti berikut:

"Iteration number 10"
"Iteration number 9"
"Iteration number 8"
"Iteration number 7"
"Iteration number 6"
"Iteration number 5"
"Iteration number 4"
"Iteration number 3"
"Iteration number 2"
"Iteration number 1"

Challenge #2

Buatlah **fungsi** untuk mencetak teks dengan penomoran terurut ke atas seperti berikut:

“Iteration number 1”
“Iteration number 4”
“Iteration number 7”
“Iteration number 10”
“Iteration number 13”
“Iteration number 16”
“Iteration number 19”
“Iteration number 22”
“Iteration number 25”
“Iteration number 28”

Challenge #3

Buatlah **fungsi** untuk mencetak teks dengan penomoran terurut ke bawah seperti berikut::

“Iteration number 28”
“Iteration number 25”
“Iteration number 22”
“Iteration number 19”
“Iteration number 16”
“Iteration number 13”
“Iteration number 10”
“Iteration number 7”
“Iteration number 4”
“Iteration number 1”

Fungsi (*Function*): *Built-in*

- **String** (http://php.net/manual/en/ref.strings.php)
  Contoh: `strlen()`, `substr()`, `trim()`, `strstr()`
- **Array** (http://php.net/manual/en/book.array.php)
  Contoh: `count()`, `sort()`, `asort()`, `ksort()`, `array_key_exists()`, `array_push()`, `array_pop()`
- **Date/Time** (http://php.net/manual/en/book.datetime.php)
  Contoh: `checkdate()`, `date_add()`, `date_diff()`, `strtotime()`, `date()`, `getdate()`, `mktime()`, `time()`
- **Math** (http://php.net/manual/en/book.math.php)
  Contoh: `abs()`, `ceil()`, `floor()`, `log()`, `min()`, `max()`, `pow()`, `round()`, `rand()`, `sqrt()`, `sin()`, `cos()`, `tan()`

Variabel Global Versus Lokal

http://php.net/manual/en/language.variables.scope.php

```
2
3       $x = 42;
4       $a = 5;
5       $y = foo($a+1, $x);
6
7       echo "$x, $y, $a";
8
9       function foo($x, $y)
10      {
11          while ($x < $y)
12              $x = $x * 2;
13          return $x;
14      }
```

Global variables:
$x: 42
$y: 48
$a: 5

Local variables:
$x: 48
$y: 42

- Parameter dan variabel lain yang digunakan di dalam fungsi merupakan variabel local dari fungsi tersebut
  - Bahkan jika namanya sama dengan nama variabel global
- Secara *default*, argumen fungsi diaplikasikan secara "*pass-by-value*"

Pass-by-Value VS *Pass-by-Reference*

http://php.net/manual/en/language.references.pass.php

```
2
3       function foo($a)
4       {
5           $a[1] = 0;
6       }
7
8       function bar(&$a)
9       {
10          $a[1] = 0;
11      }
12
13      $x = array(1, 2, 3);
14
15      foo($x);
16      echo $x[1];
17
18      bar($x);
19      echo $x[1];
20
```

Local variables:
$a: array(1, 0, 3)

Local variables:
$a:

Global variables:
$x: array(1, 0, 3)

Penggunaan *Include*

https://www.php.net/manual/en/function.include.php

page1.php

```
<!doctype html>
<html xmlns="http://www.w3.org/1999/xhtml">
    <head>
        <meta http-equiv="Content-Type" content="text/html;charset=UTF-8" />
        <meta name="keywords" content="Arana Little Athletics, Little Athletic
        <link rel="stylesheet" type="text/css" href="/styles/page_layout.css"
        <link rel="stylesheet" type="text/css" href="/styles/menu.css" />
        <link rel="stylesheet" type="text/css" href="/styles/general.css" />
        <meta name="description" content="Arana Little Athletics was establis
        <title>Arana Little Athletics - Home Page</title>
    </head>
    <body>
        <div id="main" class="centre">
            <img id="banner" class="centre" src="/images/labanner.gif" alt="Li
            <ul id="nav-container">
                <li><a href="/index.php">Home</a> </li>
                <li><a href="/RegisterMember.php">Join</a> </li>
                <li><a href="/ListEvents.php">Results</a></li>
                <li><a href="">Competitions</a></li>
                <li><a href="">Weather</a></li>
                <li><a href="">News</a> </li>
                <li><a href="">Coaching</a> </li>
                <li><a href="">Parents</a> </li>
                <li><a href="">Committee</a> </li>
                <li><a href="">Contact Us</a> </li>
            </ul>
            <div id="right-colour">
                <div id="reset">
                    <div id="left">
                        <a href="http://www.qlaa.asn.au/">
                            <img style="border: none;" class="centre" src="/ir
                        </a>            </div>
                    <div id="right">
                        <div id="news">
                            <div id="news-heading">
                                Latest News
                            </div>
                            <div id="news-body">
                                <p>
                                    Nominations close for Junior Carnival/Seni
```

page2.php

```
<!doctype html>
<html xmlns="http://www.w3.org/1999/xhtml">
    <head>
        <meta http-equiv="Content-Type" content="text/html;charset=UTF-8" />
        <meta name="keywords" content="Arana Little Athletics, Little Athletics,
        <link rel="stylesheet" type="text/css" href="/styles/page_layout.css" />
        <link rel="stylesheet" type="text/css" href="/styles/menu.css" />
        <link rel="stylesheet" type="text/css" href="/styles/general.css" />
        <meta name="description" content="Register a new athlete" />
        <title>Arana Little Athletics - Registration Page</title>
        <link rel="stylesheet" type="text/css" href="/styles/forms.css" />
        <script src="/scripts/register.js" type="text/javascript">
        </script>
    </head>
    <body>
        <div id="main" class="centre">
            <img id="banner" class="centre" src="/images/labanner.gif" alt="Litt
            <ul id="nav-container">
                <li><a href="/index.php">Home</a> </li>
                <li><a href="/RegisterMember.php">Join</a> </li>
                <li><a href="/ListEvents.php">Results</a></li>
                <li><a href="">Competitions</a></li>
                <li><a href="">Weather</a></li>
                <li><a href="">News</a> </li>
                <li><a href="">Coaching</a> </li>
                <li><a href="">Parents</a> </li>
                <li><a href="">Committee</a> </li>
                <li><a href="">Contact Us</a> </li>
            </ul>
            <div id="right-colour">
                <div id="reset">
                    <div id="left">
                        <a href="http://www.qlaa.asn.au/">
                            <img style="border: none;" class="centre" src="/image
                        </a>
                    </div>
                    <div id="right">                ?
                        <h1>Registration Form</h1>?<form action="RegisterMember.
                            <fieldset>
                                <legend>Athlete Information</legend>
```

Penggunaan *Include* [2]

menu.inc

```
<ul id="nav-container">
    <li><a href="/index.php">Home</a> </li>
    <li><a href="/RegisterMember.php">Join</a> </li>
    <li><a href="/ListEvents.php">Results</a></li>
    <li><a href="">Competitions</a></li>
    <li><a href="">Weather</a></li>
    <li><a href="">News</a> </li>
    <li><a href="">Coaching</a> </li>
    <li><a href="">Parents</a> </li>
    <li><a href="">Committee</a> </li>
    <li><a href="">Contact Us</a> </li>
</ul>
```

page2.php | page1.php

```
<!doctype html>
<html xmlns="http://www.w3.org/1999/xhtml">
    <head>
        <meta http-equiv="Content-Type" content="text/html;charset=
        <meta name="keywords" content="Arana Little Athletics, Lit
        <link rel="stylesheet" type="text/css" href="/styles/page_
        <link rel="stylesheet" type="text/css" href="/styles/menu.
        <link rel="stylesheet" type="text/css" href="/styles/gener
        <meta name="description" content="Arana Little Athletics w
        <title>Arana Little Athletics - Home Page</title>
    </head>
    <body>
        <div id="main" class="centre">
            <img id="banner" class="centre" src="/images/labanner.
            <?php include 'menu.inc' ?>
            <div id="right-colour">
                <div id="reset">
                    <div id="left">
                        <a href="http://www.qlaa.asn.au/">
                            <img style="border: none;" class="cent
                        </a>                    </div>
                    <div id="right">
                        <div id="news">
```

Penggunaan *Include* [3]

menu.inc

```
<ul id="nav-container">
    <li><a href="/index.php">Home</a> </li>
    <li><a href="/RegisterMember.php">Join</a> </li>
    <li><a href="/ListEvents.php">Results</a></li>
    <li><a href="">Competitions</a></li>
    <li><a href="">Weather</a></li>
    <li><a href="">News</a> </li>
    <li><a href="">Coaching</a> </li>
    <li><a href="">Parents</a> </li>
    <li><a href="">Committee</a> </li>
    <li><a href="">Contact Us</a> </li>
</ul>
```

page2.php | page1.php

```
<!doctype html>
<html xmlns="http://www.w3.org/1999/xhtml">
    <head>
        <meta http-equiv="Content-Type" content="text/html;charset=
        <meta name="keywords" content="Arana Little Athletics, Lit
        <link rel="stylesheet" type="text/css" href="/styles/page_
        <link rel="stylesheet" type="text/css" href="/styles/menu.
        <link rel="stylesheet" type="text/css" href="/styles/gener
        <meta name="description" content="Register a new athlete"
        <title>Arana Little Athletics - Registration Page</title>
        <link rel="stylesheet" type="text/css" href="/styles/forms
        <script src="/scripts/register.js" type="text/javascript">
        </script>
    </head>
    <body>
        <div id="main" class="centre">
            <img id="banner" class="centre" src="/images/labanner.
            <?php include 'menu.inc' ?>
            <div id="right-colour">
                <div id="reset">
                    <div id="left">
                        <a href="http://www.qlaa.asn.au/">
                            <img style="border: none;" class="cent
```

Penggunaan *Include* [4]

- Cek penggunaan dari:
  - include_ once (https://www.php.net/manual/en/function.include-once.php)
  - require (https://www.php.net/manual/en/function.require.php)
  - require_ once (https://www.php.net/manual/en/function.require-once.php)

Challenge #4

Buatlah **Kalender Bulan Ini** seperti gambar berikut dengan menggunakan **fungsi** :

September 2022

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

@University of Trunojoyo Madura

Hint: Dokumen *Workshop* Pertemuan #5

Note: Tampilan gambar di atas dihasilkan ketika program dieksekusi pada tanggal 17 September 2022

Pemrograman Berbasis Obyek

http://php.net/manual/en/language.oop5.php

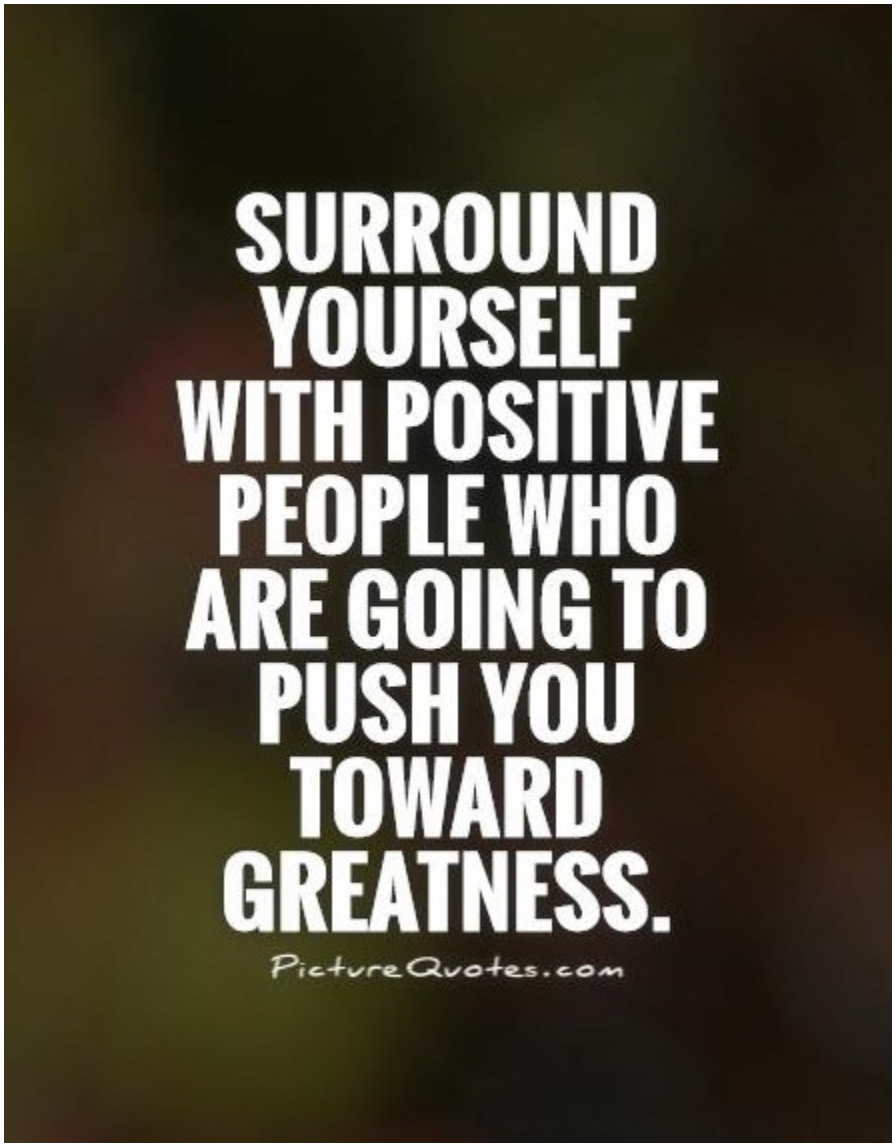
- Pemrograman berbasis obyek di dalam PHP:
  - Classes
  - Methods
  - Fields

- **NOTE:** Fitur ini tidak dibahas di dalam perkuliahan Pengembangan Aplikasi *Web*

Video Perkuliahan

- Penjelasan materi kuliah dapat dilihat via YouTube (*recording* Semester Gasal 2020/2021): https://youtu.be/rj0IwSoiPNA **mulai dari *timestamp* 39:16**
- *Note*: Kerjakan *Challenge(s)* berdasarkan *slide* Semester Gasal 2023/2024 (bukan berdasarkan *slide* yang ditampilkan dalam *recording* Semester Gasal 2020/2021)

there is
ALWAYS
something to
BE GRATEFUL
for


SURROUND
YOURSELF
WITH POSITIVE
PEOPLE WHO
ARE GOING TO
PUSH YOU
TOWARD
GREATNESS.
PictureQuotes.com