# Web Service
{CLIENT}

- Persiapan aplikasi
(folder project dan instalasi Codeiginter)
- Library cURL
- Controller dan view
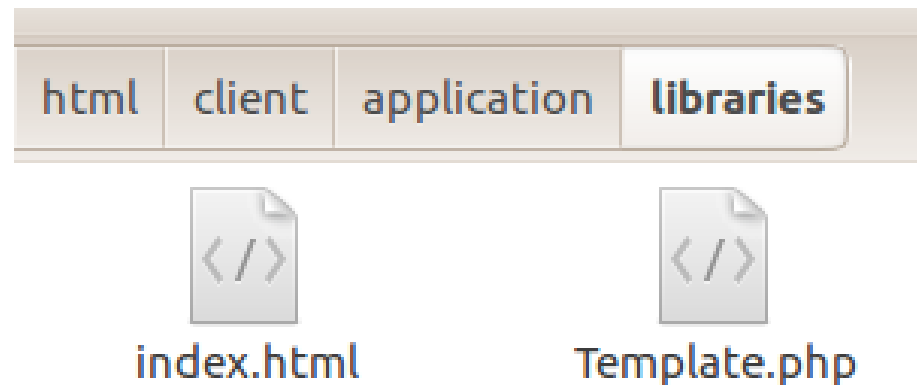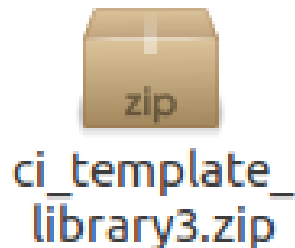
Persiapan file project CLIENT

- Download Codeigniter (CI) terbaru
  - https://www.codeigniter.com/download
  - https://github.com/bernardvery/webservice

- Buat folder dengan nama"**client**" pada direktori web server (misalkan: d:\xampp\htdocs\server) dan Extract CI ke folder tersebut
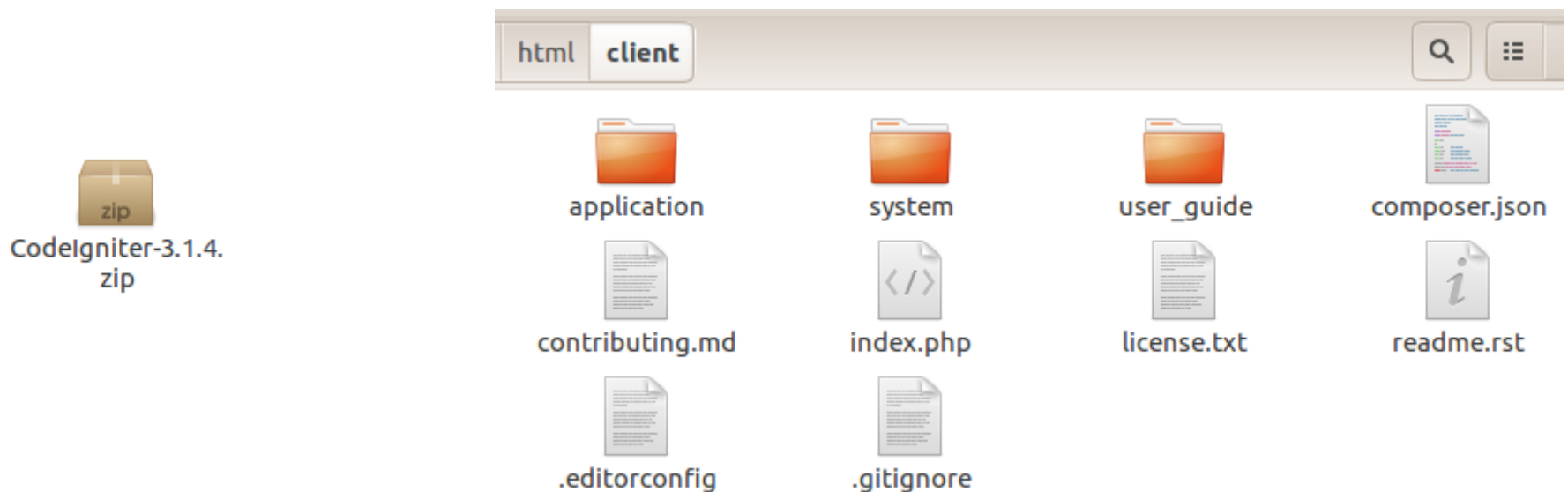
Library Template
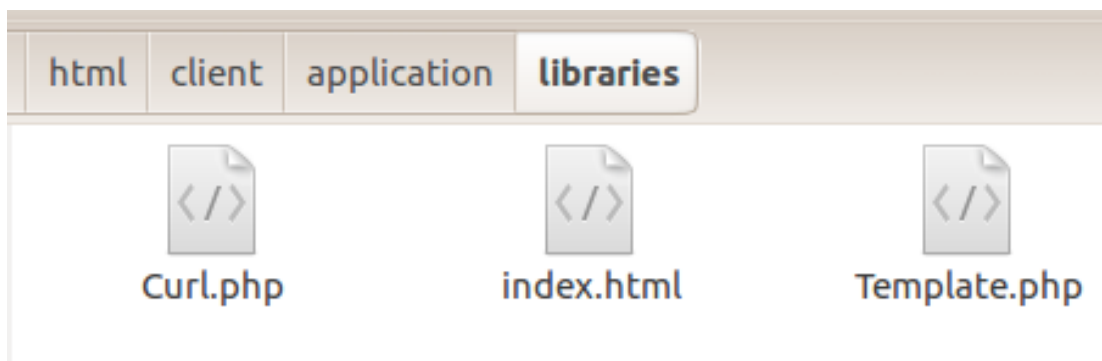
- Download library template di:
  - http://goo.gl/eLRspS
  - https://github.com/bernardvery/webservice

- Extract lalu copy file "Template.php" ke folder "application/libraries"

Library cURL

- Download library cURL di:
  - https://github.com/philsturgeon/codeigniter-curl
  - https://github.com/bernardvery/webservice

- Extract lalu copy file "libraries/Curl.php" ke folder "application/libraries"
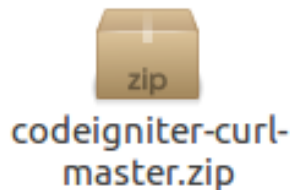
Konfigurasi Base_URL

- Modifikasi file "config.php" pada folder "application/config", isi dengan url: 'http://localhost/client'

```
22  | If you need to allow multiple domains, remember t
23  | a PHP script and you can easily do that on your o
24  |
25  */
26  $config['base_url'] = 'http://localhost/client/';
27
```

Konfigurasi Autoload Library

- Modifikasi file "autoload.php" pada folder "application/config"

```
|    $autoload['libraries'] = array('user_agent' => 'ua');
*/
$autoload['libraries'] = array('template','curl');
```

```
|    $autoload['helper'] = array('url', 'file');
*/
$autoload['helper'] = array('file','form','url');
```

Controller Client

- Buat controller dengan nama "Customer.php" simpan pada folder "application/controllers", buat <u>class Customer extends CI_Controller</u> seperti berikut:

```php
1  <?php
2  defined('BASEPATH') OR exit('No direct script access allowed');
3  /**
4   * Request untuk akses data customer di server
5   */
6  class Customer extends CI_Controller{
7      var $API = "";
8
9      function __construct() {
10         parent::__construct();
11         $this->API="http://localhost/server/index.php/api/customers/";
12     }
13
14  }
```

Function index()

- Tambahkan fungsi **index()** pada class Customer.php untuk menampilkan daftar customer dari server

```php
// menampilkan daftar customer
function index(){
    $data['customers'] = $this->__execute($this->API,'get', '');
    $this->template->load('template_master', 'customer/list', $data);
}
```

Function add()

- Tambahkan fungsi **add()** pada class Customer.php untuk load form tambah dan memproses simpan data baru ke server.

```php
// load form tambah dan memproses simpan data baru
function add(){
    if (isset($_POST['submit'])) {
        $params = array(
                'name'=> $this->input->post('name'),
                'phone'=> $this->input->post('phone'),
                'city'=> $this->input->post('city'));
        $this->__execute($this->API,'post', $params);
        redirect('customer');
    } else {
        $this->template->load('template_master', 'customer/add');
    }
}
```

function edit()

- Tambahkan fungsi **edit()** pada class Customer.php untuk // load form edit dan memproses simpan update data

```php
// load form edit dan memproses simpan update data
function edit(){
    if (isset($_POST['submit'])) {
        $params = array(
                'name' => $this->input->post('name'),
                'id'=> $this->input->post('id'),
                'phone' => $this->input->post('phone'),
                'city' => $this->input->post('city'));
        $result = $this->__execute($this->API.'format/json/','put',$params);
        redirect('customer');
    } else {
        $id = $this->uri->segment(3);
        $data['customer'] = $this->__execute($this->API.'id/'.$id,'get', array('id' => $id));
        $this->template->load('template_master','customer/edit', $data);
    }
}
```

Function delete()

- Tambahkan fungsi **delete()** pada class Customer.php untuk hapus data customer pada server

```
// hapus data customer
function delete(){
    $id = $this->uri->segment(3);
    $this->__execute($this->API,'delete', array('id' => $id));
    redirect('customer');
}
```

Function __execute()

- Tambahkan fungsi __**execute()** pada class Customer.php untuk eksekusi request ke server menggunakan library cURL

```php
function __execute($url,$method,$param) {
    $this->curl->create($url);
    $this->curl->$method($param);
    $result = json_decode($this->curl->execute());
    return $result;
}
```

Persiapan view untuk client

- Buat folder baru "customer" pada "client/application/views"

- Buat file view pada folder "application/views/customer" yaitu:
  - list.php
  - add.php
  - edit.php

View untuk list customer (list.php)

```php
1  <h3>DATA CUSTOMER</h3>
2  <?php echo anchor('customer/add','ENTRY',
3          array('class'=>'btn btn-danger btn-sm')); ?>
4  <table class="table table-bordered">
5      <tr>
6          <td>NO</td>
7          <td>NAMA LENGKAP</td>
8          <td>ALAMAT</td>
9          <td>NO HP</td>
10         <td colspan="2">ACTION</td>
11     </tr>
12 <?php
13 $no=1;
14 foreach ($customers as $customer){
15     echo "<tr>
16     <td width='10'>$no</td>
17     <td>$customer->customerName</td>
18     <td>$customer->customerCity</td>
19     <td>$customer->customerPhone</td>
20     <td width='20'>";
21     echo anchor('customer/edit/'.$customer->customerID,'Edit',
22             array('class'=>'btn btn-danger btn-sm'));
23     echo "</td>
24     <td width='20'>";
25     echo anchor('customer/delete/'.$customer->customerID,'Delete',
26             array('class'=>'btn btn-danger btn-sm'));
27     echo "</td>
28     </tr>";
29     $no++;
30 }
31 ?>
32 </table>
```

View untuk add customer (add.php)

```php
1  <h3>Entry DATA CUSTOMER</h3>
2  <?php echo form_open('customer/add'); ?>
3
4  <table class="table table-bordered">
5      <tr>
6          <td>Nama</td>
7          <td><?php echo form_input('name', '',
8              "placeholder='Nama Lengkap' class='form-control'"); ?></td>
9      </tr>
10     <tr>
11         <td>Kota</td>
12         <td><?php echo form_input('city', '',
13             "placeholder='Kota' class='form-control'"); ?></td>
14     </tr>
15     <tr>
16         <td>No HP</td>
17         <td><?php echo form_input('phone', '',
18             "placeholder='No HP' class='form-control'"); ?></td>
19     </tr>
20     <tr>
21         <td colspan="2">
22         <?php echo form_submit('submit','simpan',"class='btn btn-danger btn-sm'") ?>
23         </td>
24     </tr>
25 </table>
26 </form>
```

View untuk edit customer (edit.php)

```php
1  <h3>Edit DATA CUSTOMER</h3>
2  <?php echo form_open('customer/edit'); ?>
3  <?php echo form_hidden('id', $customer[0]->customerID);?>
4  <table class="table table-bordered">
5      <tr>
6          <td>Nama</td>
7          <td><?php echo form_input('name',$customer[0]->customerName,
8              "placeholder='Nama Lengkap' class='form-control'"); ?></td>
9      </tr>
10     <tr>
11         <td>Kota</td>
12         <td><?php echo form_input('city',$customer[0]->customerCity,
13             "placeholder='Kota' class='form-control'"); ?></td>
14     </tr>
15     <tr>
16         <td>No HP</td>
17         <td><?php echo form_input('phone',$customer[0]->customerPhone,
18             "placeholder='No HP' class='form-control'"); ?></td>
19     </tr>
20     <tr>
21         <td colspan="2">
22         <?php echo form_submit('submit', 'simpan',"class='btn btn-danger btn-sm'") ?>
23         <?php echo anchor('customer','Kembali',array('class'=>'btn btn-danger btn-sm'));?>
24         </td>
25     </tr>
26 </table>
27 </form>
28
```
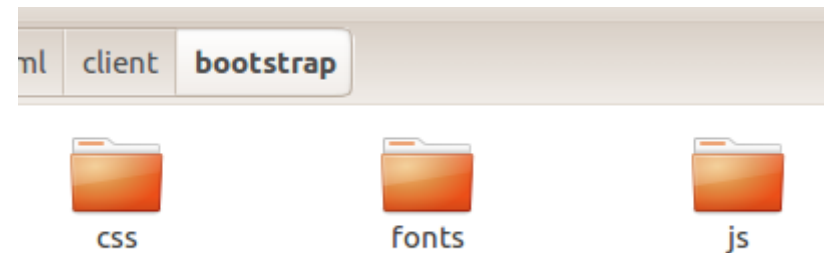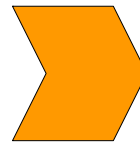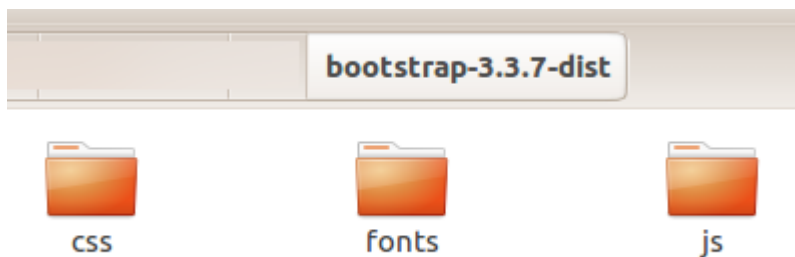
Persiapan Frontend CLIENT

- Download Bootstrap terbaru
  - http://getbootstrap.com/
  - https://github.com/bernardvery/webservice

- Buat folder dengan nama "**bootstrap**" pada direktori client, lalu extract file bootstrap-3.3.7-dist.zip dan copy kan isinya ke folder tersebut
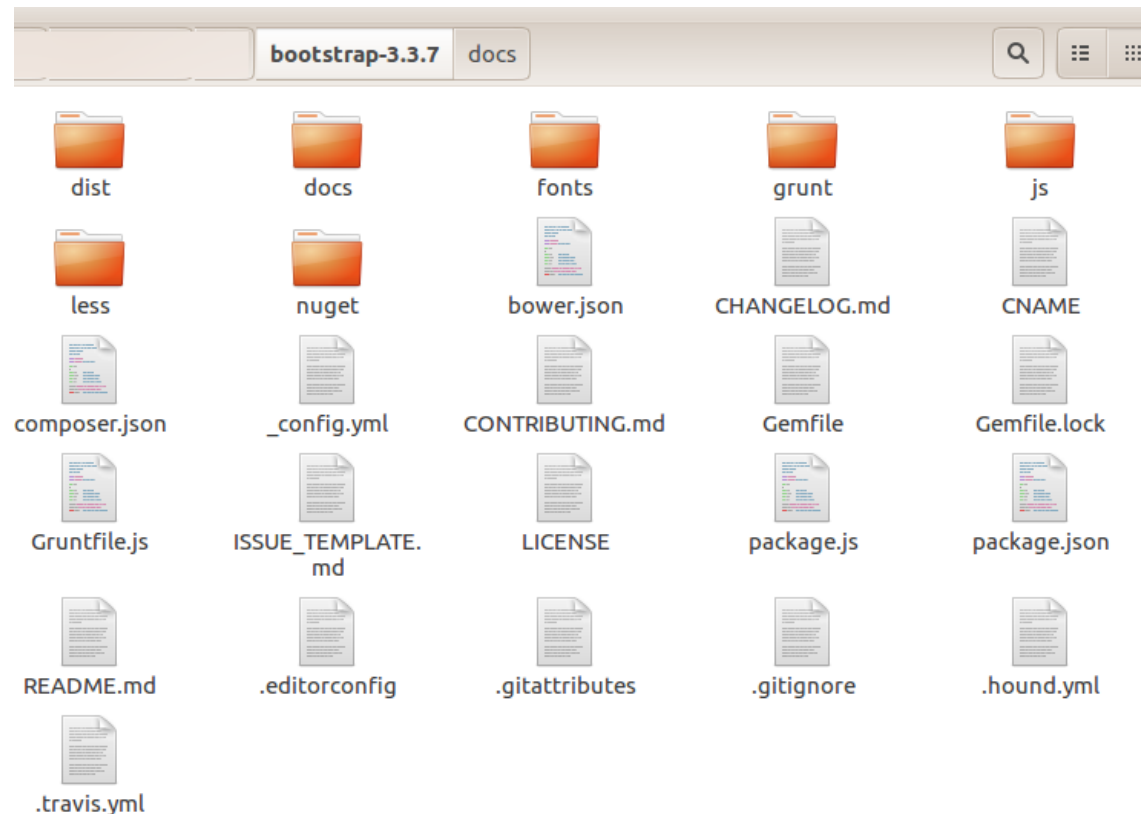
Template View CLIENT (1)

- Download file template "bootstrap-3.3.7.zip" di url:
  - http://getbootstrap.com/getting-started/#template
  - https://github.com/bernardvery/webservice

- Extract file tersebut

Template View CLIENT (2)

- Pilih salah satu template bootstrap yang ada pada folder "docs/examples"

- pilih folder "navbar", rename file "index.html" menjadi "template_master.php"

- copy isi folder tesebut ke folder "client/application/views"
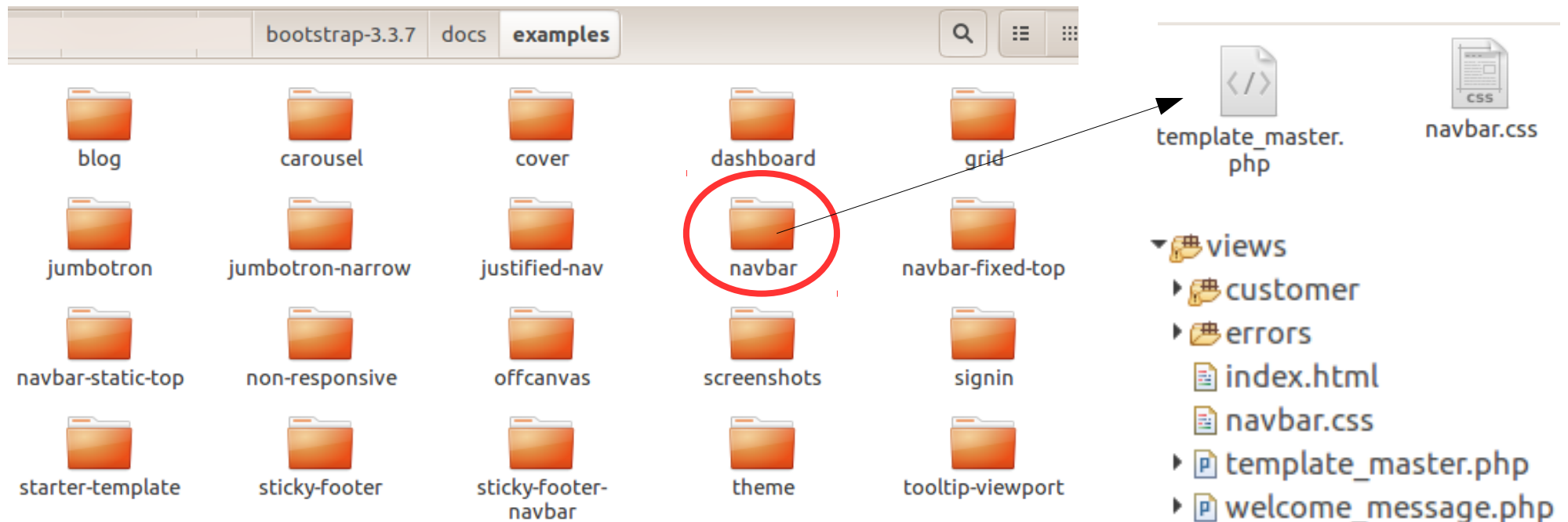
Template View CLIENT (3)

- Modifikasi file "template_master.php", yaitu
  - Bagian "Bootstrap core CSS"

```
<!-- Bootstrap core CSS -->
<link href="../../dist/css/bootstrap.min.css" rel="stylesheet">


<!-- Bootstrap core CSS -->
<link href="<?php echo base_url();?>bootstrap/css/bootstrap.min.css" rel="stylesheet">
```

Template View CLIENT (4)

```
<!-- Static navbar -->
<nav class="navbar navbar-default">
  <div class="container-fluid">
    <div class="navbar-header">
      <button type="button" class="navbar-toggle collapsed" data-toggle="collapse" data-target="#navbar" aria-expan
        <span class="sr-only">Toggle navigation</span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
      </button>
      <a class="navbar-brand" href="#">Project name</a>
    </div>
    <div id="navbar" class="navbar-collapse collapse">
      <ul class="nav navbar-nav">
        <li class="active"><a href="#">Home</a></li>
        <li><a href="#">About</a></li>
        <li><a href="#">Contact</a></li>
        <li class="dropdown">
          <a href="#" class="dropdown-toggle" data-toggle="dropdown" role="button" aria-haspopup="true" aria-expand
          <ul class="dropdown-menu">
            <li><a href="#">Action</a></li>
            <li><a href="#">Another action</a></li>
            <li><a href="#">Something else here</a></li>
            <li role="separator" class="divider"></li>
            <li class="dropdown-header">Nav header</li>
            <li><a href="#">Separated link</a></li>
            <li><a href="#">One more separated link</a></li>
          </ul>
        </li>
      </ul>
      <ul class="nav navbar-nav navbar-right">
        <li class="active"><a href="./">Default <span class="sr-only">(current)</span></a></li>
        <li><a href="../navbar-static-top/">Static top</a></li>
        <li><a href="../navbar-fixed-top/">Fixed top</a></li>
      </ul>
    </div><!--/.nav-collapse -->
  </div><!--/.container-fluid -->
</nav>
```

CUSTOMER PANEL {CLIENT}

Modifikasi menjadi ini

```
<li class="active"><?php echo anchor('customer','HOME');?></li>
<li><?php echo anchor('customer','LIST');?></li>
<li><?php echo anchor('customer/add','ENTRY');?></li>
```

Hapus
Bagian ini

Template View CLIENT (5)

Ganti dengan ini

```html
<div class="container">
  <?php echo $contents; ?>
</div>
```

```html
<!-- Main component for a primary marketing message or call to action -->
<div class="jumbotron">
  <h1>Navbar example</h1>
  <p>This example is a quick exercise to illustrate how the default, static navbar and fixed to top navbar work.
  <p>
    <a class="btn btn-lg btn-primary" href="../../components/#navbar" role="button">View navbar docs &raquo;</a>
  </p>
</div>

</div> <!-- /container -->


<!-- Bootstrap core JavaScript
================================================== -->
<!-- Placed at the end of the document so the pages load faster -->
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.4/jquery.min.js"></script>
<script>window.jQuery || document.write('<script src="../../assets/js/vendor/jquery.min.js"><\/script>')</script>
<script src="../../dist/js/bootstrap.min.js"></script>
<!-- IE10 viewport hack for Surface/desktop Windows 8 bug -->
<script src="../../assets/js/ie10-viewport-bug-workaround.js"></script>
</body>
</html>
```

Ganti dengan ini

```html
<script src="<?php echo base_url();?>bootstrap/js/bootstrap.min.js"></script>
```