

LAMPIRAN

Lampiran.1

```
public function index()
{

    $data['nama'] = "Hasil Single Exponential Smooting";
    $id_user=$this->session->userdata('id_user');
    $data['user']=$this->User_model->get_user($id_user);
    $data['at']=$this->Hasil_forecast_model->get_ses_minyak();
    $data['ft']=$this->Hasil_forecast_model->get_ses_hasil();
    $data['bulan']=$this->Hasil_forecast_model->get_label_bawah();
    $data['hitung_ses']=$this->Hasil_forecast_model->get_all_ses();
    $data['hitung_ses1']=$this->Hasil_forecast_model->get_all_ses();
    $data['MAPE']=$this->Hasil_forecast_model->get_mape_ses();
    $data['ramal_ses']=$this->Ramal_model->get_ramal_ses();
    // var_dump($data['ramal_ses']);
    // die;
    $this->load->view("Templates/header.php", $data);
    $this->load->view("Templates/navbar.php", $data);
    $this->load->view("Templates/leftmenu.php", $data);
    $this->load->view('Hasil_SES/index.php', $data);
    $this->load->view ("Templates/footer.php", $data);

}

public function get_ses_minyak()
{
    $sqldtall="SELECT  jumlah_minyak FROM  data_minyak  NATURAL JOIN
hitung_ses where y_aksen_ses!=""';
    $query1 = $this->db->query($sqldtall);
    r      eturn $query1->result_array();

}

public function get_ses_hasil()
{
```

```

$sqldtall="SELECT y_aksen_ses FROM data_minyak NATURAL JOIN hitung_ses where
y_aksen_ses!=""';
    $query1 = $this->db->query($sqldtall);
    return $query1->result_array();

    }

    public function get_des_minyak()
    {
        $sqldtall="SELECT jumlah_minyak FROM data_minyak NATURAL JOIN
hitung_des";
        $query1 = $this->db->query($sqldtall);
        return $query1->result_array();

    }

    public function get_des_hasil()
    {
        $sqldtall="SELECT y_aksen_des FROM data_minyak NATURAL JOIN hitung_des";
        $query1 = $this->db->query($sqldtall);
        return $query1->result_array();

    }

    public function get_all_ses()
    {
        $sqldtall="SELECT * FROM data_minyak NATURAL JOIN hitung_ses ";
        $query1 = $this->db->query($sqldtall);
        return $query1->result_array();

    }

    public function get_all_des()
    {
        $sqldtall="SELECT * FROM data_minyak NATURAL JOIN hitung_des ";
        $query1 = $this->db->query($sqldtall);
        return $query1->result_array();

    }
}

```

```

public function get_label_bawah()
{
    $sqldtall="SELECT * FROM data_minyak where id_data_minyak!=1 ";
    $query1 = $this->db->query($sqldtall);
    return $query1->result_array();

    return $this->db->get()->result_array();
}

public function get_mape_ses()
{
    $sum="SELECT SUM(abs_at_ft_ses) as total FROM hitung_ses NATURAL JOIN
data_minyak";
    $query1 = $this->db->query($sum);
    $sumabs= (double) $query1->row_array()['total'];
    $carin="SELECT COUNT(abs_at_ft_ses) as n FROM hitung_ses NATURAL JOIN
data_minyak where abs_at_ft_ses!='";
    $query2 = $this->db->query($carin);
    $n= (integer) $query2->row_array()['n'];
    if ($n==0){

        $MAPE=0;
    }else{
        $MAPE=(100/$n)*$sumabs;
    }

    return $MAPE;

}

public function get_mape_des()
{
    $sum="SELECT SUM(abs_at_ft_bagiat_des) as total FROM hitung_des NATURAL JOIN
data_minyak";
    $query1 = $this->db->query($sum);

```

```

        $sumabs= (double) $query1->row_array()['total'];
$carin="SELECT COUNT(abs_at_ft_bagiat_des) as n FROM hitung_des NATURAL JOIN
data_minyak where id_data_minyak!=1";
        $query2 = $this->db->query($carin);
        $n= (integer) $query2->row_array()['n'];
        if ($n==0){

$MAPE=0;
        }else{
$MAPE=(100/$n)*$sumabs;
        }

        return $MAPE;

    }
    public function get_masa_depan_ses()
    {
        $this->db->select('*');

        $this->db->from('ramal_ses');

        return $this->db->get()->result_array();
    }
    public function get_masa_depan_des()
    {
        $this->db->select('*');

        $this->db->from('ramal_des');

        return $this->db->get()->result_array();
    }
<!-- <?php

```

```

        // foreach($hitung_ses as $hitung_ses){

// echo((double)$hitung_ses['y_aksen_ses']);
// echo(',');
// }
// die;
?> -->
<div class="main-content">

<div class="page-content">

<!-- Page-Title -->
<div class="page-title-box">
<div class="container-fluid">
    <div class="row align-items-center">
        <div class="col-md-8">
<h4 class="page-title mb-1">Hasil Forecasting Single Exponential Smoothing</h4>
        <ol class="breadcrumb m-0">
            <li class="breadcrumb-item active">Hasil Panen Padi Kabupaten
Lamongan</li>
        </ol>
        </div>
    </div>
</div>
</div>
<!-- end page title end breadcrumb -->

<div class="page-content-wrapper">
<div class="container-fluid">
    <div class="row">
        <div class="col-12">
            <div class="card">

```

```

<div class="card-body">

    <div class="flash-data-news" data-flashdata="<?= $this->session-
>flashdata('flash') ?>">
    </div>
    <div class="flash-data-data" data-flashdata="<?= $this->session-
>flashdata('data') ?>">
    </div>
    <h4 class="header-title">Chart Hasil Perhitungan</h4>
    <p class="card-title-desc">Chart Hasil Forecasting
    </p>
    <script src="https://cdn.jsdelivr.net/npm/apexcharts"></script>
    <!-- <script src="https://cdn.jsdelivr.net/npm/chart.js@2.8.0"></script> --
>

    <!-- <script src="https://cdn.jsdelivr.net/npm/chart.js@2.9.3"></script> -->
    <div id="chart">
    </div>
    <script>
    var options = {
        chart: {
            type: 'line'
        },
        series: [{
            name: 'Data Real (At)',
            type: 'line',
            data: [
                <?php
                foreach($at as $at):
                ?>
                <?= (double)$at['jumlah_minyak'].','?>
                <?php
                endforeach;?>
            ]
        }, {

```

```

        name: 'Data Hasil Forecast (Ft)',
        type: 'line',
        data: [<?php
            foreach($ft as $ft):
                ?>
                <?= (double)$ft['y_aksen_ses'].','?>
            <?php
            endforeach;?>
        ]
    },

    dataLabels: { enabled:
        true, enabledOnSeries:
        [0, 1],

    },

    xaxis: {
        categories: [<?php
            foreach($bulan as $bulan):
                ?>
                <?= (double)$bulan['t'].','?>
            <?php
            endforeach;?>
        ]
    },
    responsive: [{
        breakpoint: undefined,
        options: {},
    }]
}

```

```

var chart = new ApexCharts(document.querySelector("#chart"), options);

        chart.render();
    </script>

</div>
</div>
</div>

</div>
<div class="row">
    <div class="col-12">
        <div class="card">
            <div class="card-body">
                <h4 class="header-title">Perhitungan Permalan</h4>
                <p class="card-title-desc">Hasil Panen Padi Kabupaten Lamongan 2020-2022
            </p>

                <div class="flash-data-news" data-flashdata="<?= $this->session-
>flashdata('flash') ?>">
            </div>

                <div class="flash-data-data" data-flashdata="<?= $this->session->flashdata('data')
?>">

            </div>

                <!-- <?= var_dump($dt_kecamatan['id_kecamatan'])?> -->

                <br>

                <!-- <?= var_dump($data_air)?> -->
<table id="datatable" class="table table-bordered dt-responsive table-responsive"
        style="border-collapse: collapse; border-spacing: 0; width: 100%;">
    <thead>
        <tr>
            <th>No.</th>
            <th>Tahun</th>

```



```
<th>Bulan</th>
```

```
<th>Hasil Panen Padi /Ton (At)</th>
```

```
<th>Hasil Hasil Panen Padi /Ton (Ft)</th>
```

```
</tr>
```

```
</thead>
```

```
<tbody>
```

```
<?php $n0 = 1; ?>
```

```
<?php foreach ($hitung_ses as $hitung_ses) : ?>
```

```
<tr>
```

```
<td style="width: 4%;"><?= $n0?></td>
```

```
<td style="width: 7%;"><?= $hitung_ses['tahun']; ?></td>
```

```
<td><?= $hitung_ses['bulan']; ?></td>
```

```
<td><?= $hitung_ses['jumlah_minyak']; ?> </td>
```

```
<td><?= $hitung_ses['y_aksen_ses']; ?> </td>
```

```
</tr>
```

```
<?php $n0++ ?>
```

```
<?php endforeach ?>
```

```
</tbody>
```

```
</table>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<div class="row">
```

```

<div class="col-12">
    <div class="card">
        <div class="card-body">
            <h4 class="header-title">Perhitungan Mean Absolute Percentage
Error (MAPE)</h4>
            <p class="card-title-desc">Permalan Harga Minyak Mentah
Indonesia
            </p>

            <div class="flash-data-news" data-flashdata="<?= $this->session-
>flashdata('flash') ?>">

                </div>
            <div class="flash-data-data" data-flashdata="<?= $this->session->flashdata('data') ?>">
                </div>

            <br>

            <br>

            <!-- <?= var_dump($data_air)?> -->
            <table id="datatable" class="table table-bordered dt-responsive table-responsive"
            style="border-collapse: collapse; border-spacing: 0; width: 100%;">
                <thead>
                    <tr>
                        <th>No.</th>
                        <th>Harga Minyak USD/Barrel (At)</th>
                        <th>Hasil Forecast (Ft)</th>
                        <th>at_ft</th>
                        <th>abs_at_ft_bagiat</th>
                    </tr>
                </thead>
                <tbody>
                    <?php $n0 = 1; ?>
                    <?php foreach ($hitung_ses1 as $hitung_ses1) : ?>
                    <tr>

```

```

        <td><?=$n0?></td>
        <td><?=$hitung_ses1['jumlah_minyak']?></td>
        <td><?=$hitung_ses1['y_aksen_ses']?></td>
        <td><?=$hitung_ses1['at_ft_ses']?></td>
        <td><?=$hitung_ses1['abs_at_ft_ses']?></td>

    </tr>
    <?php $n0++ ?>
    <?php endforeach ?>
</tbody>

</table>
<h4>MAPE=<?=$MAPE/30?></h4>
</div>
</div>
</div>
<div class="row">
    <div class="col-12">
        <div class="card">
            <div class="card-body">

                <h4 class="header-title">Permalan Masa Depan</h4>
                <p class="card-tittle-desc">Hasil Panen Padi Kabupaten Lamongan
                </p>

                <div class="flash-data-news" data-flashdata="<?=$this->session->flashdata('flash') ?>">

                </div>
                <div class="flash-data-data" data-flashdata="<?=$this->session->flashdata('data') ?>">
                </div>

```

```

<!-- <?= var_dump($dt_kecamatan['id_kecamatan'])?> -->

<!-- <?= var_dump($data_air)?> -->
<table id="datatable" class="table table-bordered dt-responsive nowrap table-responsive"
style="border-collapse: collapse; border-spacing: 0; width: 100%;">
<thead>
<tr>
<th>No.</th>
<th>Tahun</th>
<th>Bulan</th>
<th>Hasil Panen /Ton (At)</th>

</tr>
</thead>
<tbody>

<tr>
<td>1</td>
<td><?=$ramal_ses['tahun']?></td>
<td><?=$ramal_ses['bulan']?></td>
<td><?=$ramal_ses['hasil_forecast']?></td>
</tr>
<?php $n0++ ?>

</tbody>

</table>

</div>
</div>

```

```

</div>

</div>

</div> <!-- container-fluid -->
</div>
<!-- end page-content-wrapper -->
</div>
<!-- End Page-content -->
<script
src="https://cdnjs.cloudflare.com/ajax/libs/Chart.js/2.3.0/Chart.bundle.js"></script>

<div class="main-content">

<div class="page-content">

<!-- Page-Title -->
<div class="page-title-box">
<div class="container-fluid">
<div class="row align-items-center">
<div class="col-md-8">
<h4 class="page-title mb-1">Ramal Harga Minyak Mentah Indonesia</h4>
<ol class="breadcrumb m-0">
<li class="breadcrumb-item active">Menggunakan Double Exponential
Smoothing</li>
</ol>
</div>
</div>

</div>

</div>
</div>
<!-- end page title end breadcrumb -->

```

```

<div class="page-content-wrapper">
  <div class="container-fluid">
    <div class="row">
      <div class="col-md-12">
        <div class="card">
          <div class="card-body">
            <div class="row">
              <div class="p-4 col-md=12">
                <blockquote class="blockquote">
                  <p>Ramal Masa Depan Harga Minyak Mentah Indonesia </p>
                </blockquote>
                <div class="dropdown-divider"></div>

              </div>
            </div>
          </div>
        <div class="row d-flex justify-content-center">
          <div class="col-md-6">
            <div class="flash-data-news"
              data-flashdata="<?= $this->session->flashdata('flash') ?>">

            </div>
            <div class="flash-data-data"
              data-flashdata="<?= $this->session->flashdata('data') ?>">
            </div>
            <!-- <?= $alpha['alpha']?> -->
          </h3>

          <form action="<?= base_url('ramalses/ramal') ?>" method="POST">
            <div class="form-group ">
              <label for="bulan">Ramal Beberapa Bulan Kedepan</label>
              <select class="form-control" id="bulan_ses" name="bulan" required>
                <option selected disabled>Pilih berapa bulan (m)</option>
                <option value="1">1</option>
                <option value="2">2</option>
                <option value="3">3</option>

```



```

    }

    public function index()
    {
        $data['nama'] = "Ramal Masa Depan";
        $id_user=$this->session->userdata('id_user');
        $data['user']=$this->User_model->get_user($id_user);
        $this->form_validation->set_rules('alpha', 'Alpha', 'required');
        $this->load->view('Templates/header.php', $data);
        $this->load->view('Templates/navbar.php', $data);
        $this->load->view('Templates/leftmenu.php', $data);
        $this->load->view('Ramal_SES/index.php', $data);
        $this->load->view('Templates/footer.php', $data);
    }

    public function ramal()
    {
        $bulan=(integer) $this->input->post('bulan', true);
        echo($bulan);
        $this->Ramal_model->add_ramal_des($bulan);
        $this->session->set_flashdata('flash', 'Sukses');
        $this->session->set_flashdata('data', 'Ramalan Masa Depan');
        redirect('hasildes');
    }
}

class Ramalses extends CI_Controller {
    public function __construct()
    {
        parent::__construct();
        $this->load->model('User_model');
        $this->load->model('Alpha_model');
        $this->load->model('Ramal_model');
        is_logged_in();
    }

    public function index()
    {
        $data['nama'] = "Ramal Masa Depan";

```



```
$id_user=$this->session->userdata('id_user');
$data['user']=$this->User_model->get_user($id_user);
$this->form_validation->set_rules('alpha', 'Alpha', 'required');
$this->load->view('Templates/header.php', $data);
$this->load->view('Templates/navbar.php', $data);
$this->load->view('Templates/leftmenu.php', $data);
$this->load->view('Ramal_SES/index.php', $data);
$this->load->view('Templates/footer.php', $data);
}
public function ramal()
{
    $bulan=(integer) $this->input->post('bulan', true);
    echo($bulan);
    $this->Ramal_model->add_ramal_des($bulan);
    $this->session->set_flashdata('flash', 'Sukses');
    $this->session->set_flashdata('data', 'Ramalan Masa Depan');
    redirect('hasildes');
}
}
```