

LISTING CODE

Main.py

```
import os
import time
import adafruit_fingerprint
import serial
from flask import json, session

import numpy as np
import pymysql
from werkzeug.utils import secure_filename

from app import app
from tables import Results
from db_config import mysql
from flask import flash, render_template, request, redirect
from werkzeug.security import generate_password_hash, check_password_hash
import pickle
import pandas as pd

nama_variabel = 'gbest_pso_1677533403968831700.pkl'
#baca variabel

with open(nama_variabel, 'rb') as file:
    # Call load method to deserialize
    gbest_pso = pickle.load(file)

print(gbest_pso)

nama_variabel2 = 'best_bat_1677744895216972500.pkl'
#baca variabel
with open(nama_variabel2, 'rb') as file:
    # Call load method to deserialize
    gbest_bat = pickle.load(file)

print(gbest_bat)

def relu(x):
    if x < 0: return 0
    else: return x

def sigmoid(x):
    return 1. / (1 + np.exp(-x))

def tanh(x):
    return (np.exp(x) - np.exp(-x)) / (np.exp(x) + np.exp(-x))
```

```

def prediksi(X, train_x, input_kernel,
hid_kernel, output_kernel):
    fit_w = np.hstack([input_x, train_x])
    X[:input_kernel*hid_kernel]
    fit_wbias = input_x = np.asarray(input_x,
X[input_kernel*hid_kernel:
dtype = np.float64,order='C')
(((input_kernel*hid_kernel)+hid_kerne
hid_temp = fit_w * input_x
l)]
hid_result =
    fit_v = np.zeros(hid_kernel)
X[((input_kernel*hid_kernel)+hid_ker
for hid_num in
nel):
range(hid_kernel):
(((input_kernel*hid_kernel)+hid_kern
hid_result[hid_num] =
el)+hid_kernel)]
relu(np.sum(hid_temp[hid_num *
fit_vbias = input_kernel : (hid_num *
input_kernel) + input_kernel]) +
X((((input_kernel*hid_kernel)+hid_ke
input_kernel) + input_kernel)) +
rnel)+hid_kernel):
fit_wbias[hid_num])
((((input_kernel*hid_kernel)+hid_kern
el)+hid_kernel)+output_kernel)]
data_result = output_temp = fit_v *
np.zeros((train_x.shape[0], 5))
hid_result
# data_result = # data_result[input_num] =
np.zeros(train_x.shape[0])
np.sum(output_temp + fit_vbias)
dr = []
for input_num in range(1):
for xx in
input_x = range(len(fit_vbias)):
np.zeros(input_kernel)
dr.append(np.sum(output_temp +
for input_for_hid_num in
fit_vbias[xx]))
range(hid_kernel):
data_result[input_num] =
if(input_for_hid_num
np.array(dr)
== 0):
input_x = train_x

```

```

        return data_result

        _hashed_password =
generate_password_hash(_password)
        # save edits
        sql = "select * from
`user` where email=%s"
        data = (_email)
        conn = mysql.connect()

        cursor = conn.cursor()
        cursor.execute(sql,
data)
        rows =
cursor.fetchone()

        compare =
check_password_hash(rows[6],_passw
ord)
        if (compare):
            session['login'] =
True
            flash('Login
successfully!')
            if
(rows[4]=='admin'):
                return
redirect('/admin')
            else:
                return
redirect('/pengguna')
            else:

```

```

        return data_result

@app.route('/', methods=['GET'])
def main_page():
    return
render_template('index.html')

@app.route('/login', methods=['GET'])
def login_view():
    return
render_template('login_bela.html')

@app.route('/login_process',
methods=['POST'])
def login_process():
    conn = None
    cursor = None
    try:
        _email =
request.form['email']
        _password =
request.form['password']
        # validate the received
values
        if _email and _password and
request.method == 'POST':
            # do not save password
as a plain text

```

```

        flash('Wrong
Username And Password!')
        return
render_template('login_bela.html')
        conn.commit()
    else:
        return 'Error while
adding user'
    except Exception as e:
        print(e)
        flash(e)
        return
render_template('register_bela.html')
    finally:
        cursor.close()
        conn.close()

@app.route('/pengguna',
methods=['GET'])
def pengguna():
    dataset =
pd.read_csv('static/uploads/dataset.csv'
)
    # get unique state
    countries =
dataset['Country/state'].unique()
    stratas = dataset['Strata'].unique()
    stratas = stratas[~pd.isna(stratas)]
    countries =
countries[~pd.isna(countries)]

        return
render_template('pengguna.html',count
ries=countries,stratas=stratas)

@app.route('/forecast_process',
methods=['POST'])
def forecast_process():
    dataset =
pd.read_csv('static/uploads/dataset.csv'
)
    _state = request.form['state']
    _strata = request.form['strata']

    filter_result =
dataset.loc[dataset['Country/state'] ==
_state, :]
    filter_result =
filter_result.loc[filter_result['Strata']
== _strata, :]

    years =
filter_result['Year'].to_numpy().tolist()
    labour_force =
filter_result["Labour force
('000)"].to_numpy().tolist()

    train = filter_result["Labour force
('000)"].iloc[-5:]

    global gbest_pso
    global gbest_bat

```

```

        years_predict =
        input_layer_kernel = list(range(int(years[-1]) + 1,
train.shape[0] # number of input int(years[-1]) + 6))
layer kernel
        hidden_layer_kernel = 10 # # psos =
number of hidden layer kernel json.dumps(labour_force)
        output_layer_kernel = 5 # bats =
json.dumps(labour_force)

    if
(request.form['algorithm']=='PSO'):
        hasil_pso =
prediksi(gbest_pso, train, return
input_layer_kernel, render_template('forecast_result.html',
hidden_layer_kernel, years=json.dumps(years_predict),psos
output_layer_kernel) =psos,bats=bats,algorithm=algorithm)
        hasil_bat = hasil_pso
    else :
        hasil_bat =
prediksi(gbest_bat, train, @app.route('/admin',
input_layer_kernel, methods=['GET'])
hidden_layer_kernel, def admin():
output_layer_kernel) return
        hasil_pso = hasil_bat render_template('adm_menu.html')

        psos = @app.route('/adm_process',
json.dumps(hasil_pso[0].tolist()) methods=['POST'])
        bats = def adm_process():
json.dumps(hasil_bat[0].tolist()) if
        algorithm = request.files["dataset"].filename != "":
request.form['algorithm'] f = request.files["dataset"]
filename =
secure_filename(f.filename)

```

```

        filename='dataset.csv'
        path = os.path.join('static/uploads/', filename)
        f.save(path)

        # Picture is saved under the
        default upload_folder (static/uploads/)
        exel = os.path.join('/',
        'static/uploads/', filename)
        flash('File Tersimpan')
        return
        render_template('adm_menu.html')

@app.route('/register',
methods=['GET'])
def reg_view():
    return
    render_template('register_bela.html')

@app.route('/logout',
methods=['GET'])
def logout():
    session['login']=False
    return
    render_template('index.html')

@app.route('/register_process',
methods=['POST'])
def register_process():
        conn = None
        cursor = None
        try:
            _name = request.form['name']
            _email = request.form['email']
            _password = request.form['password']
            _phone = request.form['phone']
            _address = request.form['address']
            _position = request.form['position']
            # validate the received
            values
            if _name and _email and
            _password and request.method ==
            'POST':
                # do not save password
                as a plain text
                _hashed_password =
                generate_password_hash(_password)
                # save edits
                sql = "INSERT INTO
                `user`(`fullname`, `phone`,
                `address`,`position`,`email`,`password`)
                VALUES(%s, %s, %s,%s, %s, %s)"

```

```

        data = @app.route('/pemilihan',
(_name, _phone, _address, _position,
_email, _hashed_password)
        methods=['GET'])
        conn = mysql.connect()
        cursor = conn.cursor()
        cursor.execute(sql,
data)
        conn.commit()
        flash('User added
successfully!')
        return redirect('/login')
    else:
        return 'Error while
adding user'
except Exception as e:
    print(e)
    flash(e)
    return
render_template('register_bela.html')
finally:
    cursor.close()
    conn.close()

@app.route('/new_user',
methods=['GET'])
def add_user_view():
    return
render_template('add.html')

@app.route('/pendaftaran',
methods=['GET'])
def pendaftaran_view():
    return
render_template('pendaftaran.html')

@app.route('/proses_pendaftaran',
methods=['POST'])
def proses_pendaftaran_view():
    print(request.form['kode_jari'])
    #munculkan page tempelkan jari
anda
    return
render_template('step1.html')

@app.route('/next_step',
methods=['POST'])
def next_step():
    #munculkan page tempelkan jari
anda

```

```

        return
render_template('step2.html')

@app.route('/final_step',
methods=['POST'])
def final_step():
    #munculkan page tempelkan jari
anda
    return
render_template('final.html')

@app.route('/add', methods=['POST'])
def add_user():
    conn = None
    cursor = None
    try:
        _name = request.form['inputName']
        _email = request.form['inputEmail']
        _password = request.form['inputPassword']
        # validate the received
values
        if _name and _email and
_password and request.method ==
'POST':
            # do not save password
as a plain text
            _hashed_password =
generate_password_hash(_password)
            # save edits
            sql = "INSERT INTO
`tbl_user`(`user_name`, `user_email`,
`user_password`)
VALUES(%s, %s, %s)"
            data = (_name, _email,
_hashed_password,)
            conn = mysql.connect()
            cursor = conn.cursor()
            cursor.execute(sql,
data)
            conn.commit()
            flash('User added
successfully!')
            return redirect('/')
        else:
            return 'Error while
adding user'
    except Exception as e:
        print(e)
    finally:
        cursor.close()
        conn.close()

@app.route('/user_ivew')
def user():

```



```

conn = None
cursor = None
try:
    conn = mysql.connect()
    cursor = conn.cursor(pymysql.cursors.DictCursor)
    cursor.execute("SELECT * FROM tbl_user")
    rows = cursor.fetchall()
    table = Results(rows)
    table.border = True
    return render_template('users.html', table=table)
except Exception as e:
    print(e)
finally:
    cursor.close()
    conn.close()

@app.route('/predict', methods=['POST'])
def predict():
    # Get value from HTML
    feature = [x for x in request.form.values()]

    #One Hot Encode Country
    d = {'China': '0', 'Italy': '1', 'Iran': '2', 'Republic of Korean': '3', 'France': '4', 'Spain': '5', 'Germany': '6', 'UAE': '7', 'Other-EUR': '8', 'Other': '9'}
    feature[22] = d[feature[22]]
    feature = [int(x) for x in feature]
    final_feature = [np.array(feature)]
    prediction = model.predict(final_feature)

    output = {0: 'None', 1: 'Mild'}

    return render_template('index_old.html', output_prediction="Prediction {}".format(output[prediction[0]]))

@app.route('/prediction')
def home():
    return render_template('index_old.html')

@app.route('/prediction2')
def home2():
    return render_template('index_niken.html')

```

```

@app.route('/edit/<int:id>')
def edit_view(id):
    conn = None
    cursor = None
    try:
        conn = mysql.connect()
        cursor = conn.cursor()
    conn.cursor(pymysql.cursors.DictCursor)
        cursor.execute("SELECT *
FROM tbl_user WHERE user_id=%s",
id)
        row = cursor.fetchone()
        if row:
            return
render_template('edit.html', row=row)
        else:
            return 'Error loading
#{id}'.format(id=id)
    except Exception as e:
        print(e)
    finally:
        cursor.close()
        conn.close()

@app.route('/update',
methods=['POST'])
def update_user():
    conn = None
    cursor = None
    try:
        _name = request.form['inputName']
        _email = request.form['inputEmail']
        _password = request.form['inputPassword']
        _id = request.form['id']
        # validate the received
values
        if _name and _email and
_password and _id and request.method
== 'POST':
            # do not save password
as a plain text
            _hashed_password =
generate_password_hash(_password)
            print(_hashed_password)
            # save edits
            sql = "UPDATE
tbl_user SET user_name=%s,
user_email=%s, user_password=%s
WHERE user_id=%s"
            data = (_name, _email,
_hashed_password, _id)
            conn = mysql.connect()
            cursor = conn.cursor()
            cursor.execute(sql,
data)
            conn.commit()

```



```

        <p>
                </select>
        </p>
<label>Fever</label><br>
        <select id="Fever"
name="Fever">
                <option
value="0">False</option>
                <option
value="1">True</option>
        </select>
</p>
<p>
<label>Tiredness</label><br>
        <select
id="Tiredness" name="Tiredness">
                <option
value="0">False</option>
                <option
value="1">True</option>
        </select>
</p>
<p>
        <label>Dry
Cough</label><br>
        <select
id="DryCough" name="DryCough">
                <option
value="0">False</option>
                <option
value="1">True</option>

```

```

        </select>
</p>
<p>
<label>Difficulty
in Breathing</label><br>
        <select
id="DifficultyinBreathing"
name="DifficultyinBreathing">
                <option
value="0">False</option>
                <option
value="1">True</option>
        </select>
</p>
<p>
<label>Sore
Throat</label><br>
        <select
id="SoreThroat" name="SoreThroat">
                <option
value="0">False</option>
                <option
value="1">True</option>
        </select>
</p>
<p>
<label>None
Sympton</label><br>
        <select
id="NoneSympton"
name="NoneSympton">

```

```

        <option
value="0">False</option>
        <option
value="1">True</option>
    </select>
</p>
<p>
<label>Pains</label><br>
    <select id="Pains"
name="Pains">
        <option
value="0">False</option>
        <option
value="1">True</option>
    </select>
</p>
<p>
<label>Nasal
Congestion</label><br>
    <select
id="NasalCongestion"
name="NasalCongestion">
        <option
value="0">False</option>
        <option
value="1">True</option>
    </select>
</p>
<p>
        <option
value="0">False</option>
        <option
value="1">True</option>
    </select>
    </p>
    <p>
        <label>Runny
Nose</label><br>
        <select
id="RunnyNose"
name="RunnyNose">
            <option
value="0">False</option>
            <option
value="1">True</option>
        </select>
    </p>
    <p>
<label>Diarrhea</label><br>
        <select
id="Diarrhea" name="Diarrhea">
            <option
value="0">False</option>
            <option
value="1">True</option>
        </select>
    </p>
    <p>
<label>None
Experiencing</label><br>
        <select
id="NoneExperiencing"
name="NoneExperiencing">
            <option
value="0">False</option>

```

```

        <option
value="1">True</option>
    </select>
</p>
<p>
    <label>Age
0-9</label><br>
    <select
id="Age0-9" name="Age0-9">
        <option
value="0">False</option>
        <option
value="1">True</option>
    </select>
</p>
<p>
    <label>Age
10-19</label><br>
    <select
id="Age10-19" name="Age10-19">
        <option
value="0">False</option>
        <option
value="1">True</option>
    </select>
</p>
<p>
    <label>Age
20-24</label><br>
    <select
id="Age20-24" name="Age20-24">

```

```

        <option
value="0">False</option>
    </select>
</p>
<p>
    <label>Age
25-59</label><br>
    <select
id="Age25-59" name="Age25-59">
        <option
value="0">False</option>
        <option
value="1">True</option>
    </select>
</p>
<p>
    <label>Age
60+</label><br>
    <select
id="Age60+" name="Age60+">
        <option
value="0">False</option>
        <option
value="1">True</option>
    </select>
</p>
<p>
    <label>Gender
Female</label><br>

```

```

        <select
id="GenderFemale"
name="GenderFemale">
        <option
value="0">False</option>
        <option
value="1">True</option>
        </select>
</p>
<p>
        <label>Gender
Male</label><br>
        <select
id="GenderMale"
name="GenderMale">
        <option
value="0">False</option>
        <option
value="1">True</option>
        </select>
</p>
<p>
        <label>Gender
Transgender</label><br>
        <select
id="GenderTransgender"
name="GenderTrasgender">
        <option
value="0">False</option>
        <option
value="1">True</option>
        </select>
        </p>
        <p>
        <label>Contact
Dont Know</label><br>
        <select
id="ContactDontKnow"
name="ContactDontKnow">
        <option
value="0">False</option>
        <option
value="1">True</option>
        </select>
</p>
        <p>
        <label>Contact
No</label><br>
        <select
id="ContactNo" name="ContactNo">
        <option
value="0">False</option>
        <option
value="1">True</option>
        </select>
        </p>
        <p>
        <label>Contact
Yes</label><br>
        <select
id="ContactYes"
name="ContactYes">

```



```

        <option
value="0">False</option>
        <option
value="1">True</option>
    </select>
</p>
<p>
</p>
<label>Country</label><br>
    <select
id="Country" name="Country">
        <option
value="China">China</option>
        <option
value="Italy">Italy</option>
        <option
value="Iran">Iran</option>
        <option
value="RepublicofKorean">Republic
of Korean</option>
        <option
value="France">France</option>
        <option
value="Spain">Spain</option>
        <option
value="Germany">Germany</option>
        <option
value="UAE">UAE</option>
        <option
value="OtherEUR">Other
EUR</option>

```

```

        <option
value="Other">Other</option>
    </select>
</p>
</dl>
<p>
    <input type="submit"
value="Submit">
</p>
</form>

```

adm_menu.html

```

{% extends "layout_bela.html" %}

{% block main %}
<div class="main-banner wow fadeIn"
id="top" data-wow-duration="1s"
data-wow-delay="0.5s">
    <div class="container">
        <div class="row">
            <div class="col-lg-12">
                <div class="row">
                    <div class="col-lg-6">
                        <div
class="right-image wow fadeInRight"
data-wow-duration="1s"
data-wow-delay="0.5s">

```

```

```

```
</div>
```

```
</div>
```

```
<div class="col-lg-6
align-self-center">
```

```
<div
class="left-content show-up
header-text wow fadeInLeft"
data-wow-duration="1s"
data-wow-delay="1s">
```

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

```
<div
class="col-lg-12">
```

```
<!--
<h2>Labour Force Prediction
Analysis using PSO and BAT
Algorithm</h2>-->
```

```
<!--
<p>Chain
App Dev is an app landing page
HTML5 template based on Bootstrap
v5.1.3 CSS layout provided by
TemplateMo, a great website to
download free CSS templates.</p>-->
```

```
</div>
```

```
<div
class="col-lg-12">
```

```
<div
class="pricing-item-pro">
```

```
<h4>Labour Force
Prediction Analysis Using <br> PSO
And BAT Algorithm</h4>
```

```
<form
action="/adm_process"
method="POST" role="form"
enctype="multipart/form-data">
```

```
<!--
<legend>Login</legend>-->
```

```
<div
class="form-group">
```

```
<label
for="">Enter Dataset:</label>
```

```
<input type="file"
id="dataset" name="dataset"
class="form-control"
placeholder="Dataset">
```

```
</div>
```

```
<div
class="border-button">
```

```
<button
type="submit" class="btn
btn-primary">Upload</button>
```

```
</div>
```

```
</form>
```

```
</div>
```

```

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

</div>
</div>
</div>
</div>
</div>
</div>
{% endblock %}

```

edit.html

```

<doctype html>
    <title>Edit User - Python Flask
MySQL CRUD</title>
    <h2>Edit User</h2>
    <form        method="post"
action="/update">
        <dl>
            <p>
                <input
name="inputName"
value="{{ row['user_name'] }}"

type="text"        placeholder="Name"
autocomplete="off" required>
            </p>

```

```

<p>
    <input
name="inputEmail"
value="{{ row['user_email'] }}"

type="text"        placeholder="Email"
autocomplete="off" required>
</p>
<p>
    <input
name="inputPassword" value=""

type="password"
placeholder="Password"
autocomplete="off" required>
</p>
</dl>
<p>
    <input        name="id"
value="{{ row['user_id'] }}"
type="hidden">
    <input type="submit"
value="Submit">
</p>
</form>

forecast_result.html

    {% extends
"layout_bela.html" %}

```

```

{% block main %}
<style>
    .card {
        width: auto;
        margin-top : 20px;
        padding: 20px;
        border: 1px solid
#ccc;
        border-radius:
20px;
        box-shadow: 0 2px
4px rgba(0, 0, 0, 0.1);
    }

    .card-title {
        font-size: 18px;
        font-weight: bold;
        margin-bottom:
10px;
    }

    .card-text {
        font-size: 14px;
        color: #555;
    }
</style>
<div class="main-banner2"
id="top" data-wow-duration="1s"
data-wow-delay="0.5s">
</div class="container">
    <div class="row">
        <div
class="col-lg-6">
            <div
class="row">
                <div
class="col-lg-12">
                    <div
class="pricing-item-pro">
                        <h4>Prediction Year {{year}}
</br>Labour Force Using
{{algorithm}} Result {{pso}}
                        </h4>
                    </div>
                </div>
            </div>
        </div>
    </div>
</div class="col-lg-12">
<div class="card">
<h2 class="card-title">Analytic</h2>
<p class="card-text">The years

```

2022-2026 are the results of predictions that are weighted with the projected labour force from 1982-2021. The meaning of prediction is the result of predicting or estimating future values using past data. The graph is the result of an estimate using the labour force data set from 1982-2021 taken from the Jabatan Perangkaan Malaysia and processed using the Particle Swarm Optimization & Bat Algorithm method

</p>

</div>

class="">

<div

</div>

</div>

</div>

</div>

<div class="col-6">

<div class="row">

<div

class="col-lg-12 align-self-center">

<div

class="left-content show-up

header-text wow fadeInLeft"

data-wow-duration="1s"

data-wow-delay="1s">

<div

class="row">

<div

class="col-lg-12">

<div>

<canvas style="background-color: #fff;" id="myChart" width="200" height="200"></canvas>

</div>

</div>

</div>

</div>

</div>

<div

class="col-lg-6 align-self-center" hidden>

<div

class="left-content show-up

header-text wow fadeInLeft"

data-wow-duration="1s"

data-wow-delay="1s">


```

        backgroundColor:
'rgba(255, 99, 132, 0.2)',
        lineTension: 0.4,
    }],
    },
});

const myChart2 = new Chart(ctx2,
{
    type: 'line',
    data: {
        labels: years,
        datasets: [{
            label: 'Labour Force
Graph (BAT)',
            data: bats, // Data on
            Y axis
            borderWidth: 1
        }],
    }
});
</script>

{% endblock %}

layout.html
<!DOCTYPE html>

```

```

<!--[if lt IE 7]> <html
class="no-js lt-ie9 lt-ie8 lt-ie7">
<![endif]-->
<!--[if IE 7]> <html
class="no-js lt-ie9 lt-ie8">
<![endif]-->
<!--[if IE 8]> <html
class="no-js lt-ie9"> <![endif]-->
<!--[if gt IE 8]><!--> <html
class="no-js"> <!--<![endif]-->
<head>
    {% block head %}
    <meta charset="utf-8">
    <meta
http-equiv="X-UA-Compatible"
content="IE=edge,chrome=1">
    <title>ITP DWD Python
Login Demo</title>
    <meta
name="description" content="">
    <meta name="viewport"
content="width=device-width">
    <link rel="stylesheet"
href="//cdnjs.cloudflare.com/ajax/libs/
twitter-bootstrap/3.0.0-rc2/css/bootstra
p.min.css">
    <style>
        body {
            padding-top:
60px;

```

```

padding-bottom: 40px;
    }
</style>

<script
src="//cdnjs.cloudflare.com/ajax/libs/
modernizr/2.6.2/modernizr.min.js"></
script>
    {% endblock %}
</head>
<body>

    <nav          class="navbar
navbar-default  navbar-fixed-top"
role="navigation">
    <a  class="navbar-brand"
href="#">ITP  Py  Flask  Login
Demo</a>
    <ul          class="nav
navbar-nav">
    <li>
    <a
href="/">Home</a>
    </li>
    <li>
    <a
href="/notes/create">Create    new
note</a>
    </li>
    <li>
    </li>
    </ul>
    </nav>

    <div class="container">
        {% block main %}{%
endblock %}
    <hr>
    <footer>
    <a
href="https://github.com/johnschimme
l/Python-Flask-Login-Sample">Githu
b code</a>
    </footer>
</div> <!-- /container -->

    {% block scripts %}

```



```

        <script
src="//cdnjs.cloudflare.com/ajax/libs/j
query/2.0.3/jquery.min.js"></script>
        <script
src="//cdnjs.cloudflare.com/ajax/libs/t
witter-bootstrap/3.0.0-rc2/js/bootstrap.
min.js
"></script>
        <script
src="/static/js/main.js"></script>
        {% endblock %}
    </body>
</html>

```

login_bela.html

```

{%
extends
"layout_bela.html" %}
{% block main %}
<div id="pricing"
class="pricing-tables">
    <div class="container">
        <div class="row">
            <div class="col-lg-4">
            </div>
            <div class="col-lg-4">

```

```

        <div
class="pricing-item-pro">
            <span
class="price"></span>
            <h4>Login</h4>
            <div class="icon">
                
            </div>
            <form
action="/login_process"
method="POST" role="form">
                <div
class="form-group">
                    <label
for="">Email:</label>
                    <input
type="email" id="email"
name="email" class="form-control"
placeholder="Email">
                </div>
                <div
class="form-group">
                    <label
for="">Password:</label>
                    <input
type="password" name="password"
id="password" class="form-control"
required="required" title="">

```

```

        </div>
        <div
class="border-button">
            <button
type="submit"
class="btn
btn-primary">Login</button>
        </div>
    </form>
</div>
</div>
</div>
</div>
</div>
{ % endblock % }

```

pemilihan.html

```

<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="utf-8">
        <meta
content="width=device-width,
initial-scale=1.0" name="viewport">
        <title>HeroBiz    Bootstrap
Template - Home 1</title>
        <meta
content=""
name="description">
        <meta
content=""
name="keywords">
        <!-- Favicons -->
        <link
href="/static/assets/img/favicon.png"
rel="icon">
        <link
href="/static/assets/img/apple-touch-ic
on.png" rel="apple-touch-icon">
        <!-- Google Fonts -->
        <link
rel="preconnect"
href="https://fonts.googleapis.com">
        <link
rel="preconnect"
href="https://fonts.gstatic.com"
crossorigin>
        <link
href="https://fonts.googleapis.com/css
2?family=Open+Sans:ital,wght@0,30
0;0,400;0,500;0,600;0,700;1,300;1,40

```

```
0;1,500;1,600;1,700&family=Poppins:
ital,wght@0,300;0,400;0,500;0,600;0,
700;1,300;1,400;1,500;1,600;1,700&f
amily=Source+Sans+Pro:ital,wght@0,
300;0,400;0,600;0,700;1,300;1,400;1,
600;1,700&display=swap"
rel="stylesheet">
```

```
<!-- Vendor CSS Files -->
```

```
<link
href="/static/assets/vendor/bootstrap/c
ss/bootstrap.min.css"
rel="stylesheet">
```

```
<link
href="/static/assets/vendor/bootstrap-i
cons/bootstrap-icons.css"
rel="stylesheet">
```

```
<link
href="/static/assets/vendor/aos/aos.css
" rel="stylesheet">
```

```
<link
href="/static/assets/vendor/glightbox/c
ss/glightbox.min.css"
rel="stylesheet">
```

```
<link
href="/static/assets/vendor/swiper/swi
per-bundle.min.css" rel="stylesheet">
```

```
<!-- Variables CSS Files.
Uncomment your preferred color
scheme -->
```

```
<link
href="/static/assets/css/variables.css"
rel="stylesheet">
```

```
<!-- <link
href="assets/css/variables-blue.css"
rel="stylesheet"> -->
```

```
<!-- <link
href="assets/css/variables-green.css"
rel="stylesheet"> -->
```

```
<!-- <link
href="assets/css/variables-orange.css"
rel="stylesheet"> -->
```

```
<!-- <link
href="assets/css/variables-purple.css"
rel="stylesheet"> -->
```

```
<!-- <link
href="assets/css/variables-red.css"
rel="stylesheet"> -->
```

```
<!-- <link
href="assets/css/variables-pink.css"
rel="stylesheet"> -->
```

```
<!-- Template Main CSS File
-->
```

```
<link
href="/static/assets/css/main.css"
rel="stylesheet">
```

```
<!--
=====
```

```

=====
=
* Template Name: HeroBiz -
v2.1.0
* Template URL:
https://bootstrapmade.com/herobiz-bo
otstrap-business-template/
* Author: BootstrapMade.com
* License:
https://bootstrapmade.com/license/
=====
=====
== -->
</head>
<body>
<main id="main">
<!-- ===== Team Section
===== -->
<section id="team"
class="team">
<div class="container"
data-aos="fade-up">
<div
class="section-header">
<h2>E Voting</h2>

```

```

<p>Silahkan Pilih
Sesuai Hati Nurani Anda</p>
</div>
<div class="row gy-5">
<div class="col-xl-4
col-md-6 d-flex" data-aos="zoom-in"
data-aos-delay="200">
<div
class="team-member">
<div
class="member-img">

</div>
<div
class="member-info">
<h4>Walter
White</h4>
<span>Calon
1</span>
</div>
</div>
</div><!-- End Team
Member -->
<div class="col-xl-4
col-md-6 d-flex" data-aos="zoom-in"
data-aos-delay="400">

```

```

        <div
class="team-member">
        <div
class="member-img">
            
        </div>
        <div
class="member-info">
            <h4>Sarah
Jhonson</h4>
            <span>Calon
2</span>
        </div>
    </div>
</div><!-- End Team
Member -->

```

```

        <div class="col-xl-4
col-md-6 d-flex" data-aos="zoom-in"
data-aos-delay="600">
            <div
class="team-member">
                <div
class="member-img">
                    
                </div>

```

```

        <div
class="member-info">
            <h4>William
Anderson</h4>
            <span>Calon
3</span>
        </div>
    </div>
</div><!-- End Team
Member -->
</div>
</section><!-- End Team
Section -->

```

```

        <div class="container">
            <div class="row gy-5
gx-lg-12">
                <div
class="col-lg-12">
                    <form
action="/pendaftaran" method="get"
role="form" >
                        <div
class="text-center">
                            <button
class="btn-primary btn-lg "
style="font-size: 3rem;"

```

```

type="submit">Belum Terdaftar
Sebagai Pemilih?</button>
</div>
</form>
</div>
</div>
</div>
</main><!-- End #main -->

<!-- ===== Footer =====
-->
<footer id="footer"
class="footer">

</footer><!-- End Footer -->

<a href="#" class="scroll-top
d-flex align-items-center
justify-content-center"><i class="bi
bi-arrow-up-short"></i></a>

```

```

<script
src="/static/assets/vendor/glightbox/js/
glightbox.min.js"></script>
<script
src="/static/assets/vendor/isotope-layo
ut/isotope.pkgd.min.js"></script>
<script
src="/static/assets/vendor/swiper/swip
er-bundle.min.js"></script>
<script
src="/static/assets/vendor/php-email-f
orm/validate.js"></script>

<!-- Template Main JS File -->
<script
src="/static/assets/js/main.js"></script
>
</body>
</html>

```

pendaftaran.html

```

<div id="preloader"></div>

<!-- Vendor JS Files -->
<script
src="/static/assets/vendor/bootstrap/js/
bootstrap.bundle.min.js"></script>
<script
src="/static/assets/vendor/aos/aos.js">
</script>

```

```

<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<meta
content="width=device-width,
initial-scale=1.0" name="viewport">

```

<pre> <title>HeroBiz Bootstrap Template - Home 1</title> <meta content="" name="description"> <meta content="" name="keywords"> <!-- Favicons --> <link href="/static/assets/img/favicon.png" rel="icon"> <link href="/static/assets/img/apple-touch-ic on.png" rel="apple-touch-icon"> <!-- Google Fonts --> <link rel="preconnect" href="https://fonts.googleapis.com"> <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin> <link href="https://fonts.googleapis.com/css 2?family=Open+Sans:ital,wght@0,30 0;0,400;0,500;0,600;0,700;1,300;1,40 0;1,500;1,600;1,700&family=Poppins: ital,wght@0,300;0,400;0,500;0,600;0, 700;1,300;1,400;1,500;1,600;1,700&f amily=Source+Sans+Pro:ital,wght@0, 300;0,400;0,600;0,700;1,300;1,400;1, 600;1,700&display=swap" rel="stylesheet"> <!-- Vendor CSS Files --> </pre>	<pre> <link href="/static/assets/vendor/bootstrap/c ss/bootstrap.min.css" rel="stylesheet"> <link href="/static/assets/vendor/bootstrap-i cons/bootstrap-icons.css" rel="stylesheet"> <link href="/static/assets/vendor/aos/aos.css" rel="stylesheet"> <link href="/static/assets/vendor/glightbox/c ss/glightbox.min.css" rel="stylesheet"> <link href="/static/assets/vendor/swiper/swi per-bundle.min.css" rel="stylesheet"> <!-- Variables CSS Files. Uncomment your preferred color scheme --> <link href="/static/assets/css/variables.css" rel="stylesheet"> <!-- <link href="assets/css/variables-blue.css" rel="stylesheet"> --> <!-- <link href="assets/css/variables-green.css" rel="stylesheet"> --> </pre>
--	---

```

<!-- <link =====
href="assets/css/variables-orange.css" == -->
rel="stylesheet"> --> </head>
<!-- <link <body>
href="assets/css/variables-purple.css" <main id="main">
rel="stylesheet"> --> <section id="contact"
<!-- <link class="contact">
href="assets/css/variables-red.css" <div class="container">
rel="stylesheet"> --> <div
<!-- <link class="section-header">
href="assets/css/variables-pink.css" <h2>Pendaftaran
rel="stylesheet"> --> Jari</h2>
<!-- Template Main CSS File <p>Silahkan Minta
--> Kepada Petugas Kode Jari Anda </p>
<link </div>
href="/static/assets/css/main.css" </div>
rel="stylesheet">
<!-- <div class="container">
===== <div class="row gy-5
===== gx-lg-5">
= <div
* Template Name: HeroBiz - class="col-lg-4">
v2.1.0 <div
* Template URL: class="info">
https://bootstrapmade.com/herobiz-bo <h3>Kontak
otstrap-business-template/ Petugas</h3>
* Author: BootstrapMade.com <p>Hubungi
* License: Kontak berikut untuk mendapatkan
https://bootstrapmade.com/license/ kode jari.</p>
===== <div
class="info-item d-flex">

```



```

                <i class="bi
bi-geo-alt flex-shrink-0"></i>
                </div>
            </div>
            <div>
                <h4>Alamat:</h4>
                <p>POLTEK      SRIWIJAYA,Bukit
                Besar, Palembang</p>
            </div>
            </div>
            <div
            class="info-item d-flex">
                <i class="bi
bi-envelope flex-shrink-0"></i>
                </div>
                <h4>Email:</h4>
                <p>admin@polsri.ac.id</p>
            </div>
            </div>
            <div
            class="info-item d-flex">
                <i class="bi
bi-phone flex-shrink-0"></i>
                </div>
                <h4>Hp:</h4>
                <p>+62
                711 731123</p>
            </div>
            </div>
                </div>
                </div>
                <div
                class="col-lg-8">
                    <form
                    action="/proses_pendaftaran"
                    method="post" role="form" >
                        <div
                        class="row">
                            <div
                            class="col-md-12 form-group">
                                <input
                                style="font-size:1.25px;" type="text"
                                name="kode_jari"
                                class="form-control" id="kode_jari"
                                placeholder="Kode Jari" required>
                            </div>
                        </div>
                    </div>
                    </div>
                    <div
                    class="text-center">
                        <button
                        type="submit">Proses
                        Pendaftaran</button>
                    </div>
                </form>
            </div>
        </div>
    </div>

```

```

        </section>
    </main>
    <!-- End #main -->
    <!-- ===== Footer
===== -->
    <footer id="footer"
class="footer"></footer>
    <!-- End Footer -->
    <a href="#" class="scroll-top
d-flex align-items-center
justify-content-center">
        <i class="bi
bi-arrow-up-short"></i>
    </a>
    <div id="preloader"></div>
    <!-- Vendor JS Files -->
    <script
src="/static/assets/vendor/bootstrap/js/
bootstrap.bundle.min.js"></script>
    <script
src="/static/assets/vendor/aos/aos.js">
</script>
    <script
src="/static/assets/vendor/glightbox/js/
glightbox.min.js"></script>
    <script
src="/static/assets/vendor/isotope-layo
ut/isotope.pkgd.min.js"></script>
    <script
src="/static/assets/vendor/swiper/swip
er-bundle.min.js"></script>

```

```

    <script
src="/static/assets/vendor/php-email-f
orm/validate.js"></script>
    <!-- Template Main JS File
-->
    <script
src="/static/assets/js/main.js"></script
>
</body>
</html>

```

pengguna.html

```

    {%
        extends
"layout_bela.html" %}
    {% block main %}
    <div class="main-banner wow
fadeIn" id="top"
data-wow-duration="1s"
data-wow-delay="0.5s">
        <div class="container">
            <div class="row">
                <div class="col-lg-12">
                    <div class="row">
                        <div
class="col-lg-6">
                            <div
class="right-image wow fadeInRight"

```

```

data-wow-duration="1s"
data-wow-delay="0.5s">
    
    </div>
</div>
<div
class="col-lg-6 align-self-center">
    <div
class="left-content show-up
header-text wow fadeInLeft"
data-wow-duration="1s"
data-wow-delay="1s">
    <div
class="row">
        <div
class="col-lg-12">
            <!--
<h2>Labour Force Prediction
Analysis using PSO and BAT
Algorithm</h2>-->
            <!--
<p>Chain App Dev is an app landing
page HTML5 template based on
Bootstrap v5.1.3 CSS layout provided
by TemplateMo, a great website to
download free CSS templates.</p>-->
        </div>
        <div
class="col-lg-12">
            <div
class="pricing-item-pro">
                <h4> Labour Force
Prediction Analysis using <br> PSO
and BAT Algorithm</h4>
                <form
action="/forecast_process"
method="POST" role="form"
enctype="multipart/form-data">
                    <!--
<legend>Login</legend>-->
                    <div
class="form-group">
                        <label
for="">Select Country:</label>
                        <select
id="state" name="state"
class="form-control">
                            {% for c in countries %}
                                <option
value="{{c}}">{{c}}</option>
                            {% endfor %}
                        </select>
                    </div>
                    <div
class="form-group">
                        <label
for="">Select Strata:</label>

```

```

                <select                        <button
id="strata"          name="strata"      type="submit"        class="btn
class="form-control">                  btn-primary">Forecast</button>
    {% for s in stratas %}              </div>

<option
value="{{s}}">{{s}}</option>          </form>
    {% endfor %}                       </div>
                                        </div>
                </select>              </div>
            </div>                      </div>
                                        </div>
        <div                            </div>
class="form-group">                    </div>
            <label                        </div>
for="">Select Algorithm:</label>
            <select                        </div>
id="algorithm"     name="algorithm"    </div>
class="form-control">                  {% endblock %}

<option value="pso">PSO</option>

<option value="bat">BAT</option>
            </select>
        </div>

        <div                            <meta charset="UTF-8">
class="border-button">                  <title>Title</title>

```

refactor.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Title</title>
</head>
<body>

```

```

<div class="d-flex flex-column
mb-3">
  <div class="p-2 form-group">
    <label><b>Fever</b></label>
    <select class="form-control"
id="Fever" name="Fever">
      <option
value="0">False</option>
      <option
value="1">True</option>
    </select>
  </div>
  <div class="p-2 form-group">
    <label><b>Tiredness</b></label>
    <select class="form-control"
id="Tiredness" name="Tiredness">
      <option
value="0">False</option>
      <option
value="1">True</option>
    </select>
  </div>
  <div class="p-2 form-group">
    <label><b>Difficulty in
Breathing</b></label>
    <select class="form-control"
id="DifficultyinBreathing"
name="DifficultyinBreathing">

```

```

      <option
value="0">False</option>
      <option
value="1">True</option>
    </select>
  </div>
  <div class="p-2 form-group">
    <label><b>Sore
Throat</b></label>
    <select class="form-control"
id="SoreThroat" name="SoreThroat">
      <option
value="0">False</option>
      <option
value="1">True</option>
    </select>
  </div>
  <div class="p-2 form-group">
    <label><b>None
Sympton</b></label>
    <select class="form-control"
id="NoneSympton"
name="NoneSympton">
      <option
value="0">False</option>
      <option
value="1">True</option>
    </select>
  </div>
  <div class="p-2 form-group">

```

```

<label><b>Pains</b></label>
    <select class="form-control"
id="Pains" name="Pains">
    <option
value="0">False</option>
    <option
value="1">True</option>
    </select>
</div>
<div class="p-2 form-group">
    <label><b>Nasal
Congestion</b></label>
    <select
class="form-control"
id="NasalCongestion"
name="NasalCongestion">
    <option
value="0">False</option>
    <option
value="1">True</option>
    </select>
</div>
</body>
</html>

<div class="row">
    <div
class="form-group col-sm-4">
    <p>
    <label>Age 0-9</label><br>
    <select
class="form-control"
id="Age0-9" name="Age0-9">
    <option value="0">False</option>
    <option value="1">True</option>
    </select>
    </p>
</div>
    <div
class="form-group col-sm-4">
    <p>
    <label>Age 10-19</label><br>
    <select
class="form-control"
id="Age10-19" name="Age10-19">
    <option value="0">False</option>
    <option value="1">True</option>
    </select>
    </p>
</div>
</div>

```

```
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Age 20-24</label><br>
<select
class="form-control"
id="Age20-24" name="Age20-24">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Age 25-59</label><br>
<select
class="form-control"
id="Age25-59" name="Age25-59">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Age 60+</label><br>
<select
class="form-control"
id="Age60+" name="Age60+">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Gender Female</label><br>
<select
class="form-control"
id="GenderFemale" name="GenderFemale">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Age 20-24</label><br>
<select
class="form-control"
id="Age20-24" name="Age20-24">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Age 25-59</label><br>
<select
class="form-control"
id="Age25-59" name="Age25-59">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Age 60+</label><br>
<select
class="form-control"
id="Age60+" name="Age60+">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Gender Female</label><br>
<select
class="form-control"
id="GenderFemale" name="GenderFemale">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
</p>
</div>
</p>
</div>
```

```

id="GenderFemale"
name="GenderFemale">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Gender Male</label><br>
<select
class="form-control"
id="GenderMale"
name="GenderMale">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Gender
Transgender</label><br>
<select
class="form-control"
id="GenderTransgender"
name="GenderTransgender">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Contact Dont
Know</label><br>
<select
class="form-control"
id="ContactDontKnow"
name="ContactDontKnow">
<option value="0">False</option>
<option value="1">True</option>

```



```

</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Contact No</label><br>
<select      class="form-control"
id="ContactNo" name="ContactNo">
<option value="0">False</option>
<option value="1">True</option>
</select>
</p>
</div>
<div
class="form-group col-sm-4">
<p>
<label>Country</label><br>
<select      class="form-control"
id="Country" name="Country">
<option
value="China">China</option>
<option value="Italy">Italy</option>
<option value="Iran">Iran</option>
<option      value="Republic      of
Korean">Republic      of
Korean</option>
<option
value="France">France</option>

```

```

<option
value="Spain">Spain</option>
<option
value="Germany">Germany</option>
<option value="UAE">UAE</option>
<option value="Other-EUR">Other
EUR</option>
<option
value="Other">Other</option>
</select>
</p>
<div>
</div>

```

register_bela.html

```

{% extends "layout_bela.html" %}
{% block main %}
<div id="pricing"
class="pricing-tables">
  <div class="container">
    <div class="row">
      <div class="col-lg-4">
        </div>
      <div class="col-lg-4">
        <div
class="pricing-item-pro">
          <span
class="price"></span>
          <h4>Register</h4>
          <div class="icon">
            
          </div>
          <form
action="/register_process"
method="POST" role="form">
            <!--
            <legend>Login</legend>-->
            <div
class="form-group">
              <label
for="">Name:</label>
              <input
type="text" id="name" name="name"
class="form-control"
placeholder="Full Name">
            </div>
            <div
class="form-group">
              <label
for="">Phone Number:</label>

```

```

                                <input                                </div>
type="text"                                id="phone"
name="phone"  class="form-control"                                <div
placeholder="Phone">                                class="form-group">
                                </div>                                <label
                                <div                                for="">Password:</label>
class="form-group">                                <input
                                <label                                type="password"  name="password"
for="">Address:</label>                                id="password"  class="form-control"
                                <input                                required="required"  title=""
type="text"                                id="address"                                placeholder="password">
name="address"  class="form-control"                                </div>
placeholder="Your Address">
                                </div>
                                <div                                <div
class="form-group">                                class="border-button">
                                <label                                <button
for="">Position:</label>                                type="submit"  class="btn
                                <input                                btn-primary">Register</button>
type="text"                                id="position"                                </div>
name="position"  class="form-control"
placeholder="Your Position">
                                </div>                                </form>
                                <div                                <div>
class="form-group">                                <div>
                                <label                                </div>
for="">Email:</label>
                                <input                                </div>
type="email"                                id="email"                                </div>
name="email"  class="form-control"                                </div>
placeholder="Email">                                {% endblock %}

```

user.html

```
<doctype html>
  <title>List of users - Python
  Flask MySQL CRUD</title>
```

```
  <p><a
href="{{ url_for('.add_user_view') }}"
> Add User </a></p>
```

```
  <p>
    {% with messages =
get_flashed_messages() %}
    {% if messages %}
    <ul class=flashes>
      {% for message in
messages %}
        <li>{{ message }}</li>
      {% endfor %}
    </ul>
    {% endif %}
    {% endwith %}
  </p>
```

```
  {{ table }}
```