

Nama : Titi Nurhalimah Hidayah
Kelas : Cosmic

Self Learning

- Ikuti modul sampai Anda berhasil menjalankan aplikasi Prediksi Karyawan Resign!

The image shows a web application interface for predicting employee resignation and the Python code that runs it.

Sistem Prediksi Karyawan Resign

Form fields:

- Lama Bekerja (Tahun):
- Jam Kerja Perbulan:
- Pernah mengalami kecelakaan kerja: ☐ Pernah ☐ Tidak pernah
- Kategori Gaji:
- Tingkat Kepuasan:

Hasil Prediksi

```
{% if hasil_prediksi %}
Karyawan tersebut diprediksi {{nilai_kepercayaan}}%
{{(hasil_prediksi)}}

{% endif %}
```

Python Code (app.py):

```
1 import sklearn
2 from flask import Flask, render_template, request
3 from model import load, prediksi
4
5 app = Flask(__name__)
6
7 # Load model dan scaler
8 load()
9
10 @app.route('/')
11 def home():
12     return render_template('index.html')
```

Terminal Output:

```
PS C:\Users\User\Prediksi Karyawan Resign> python app.py
C:\Users\User\AppData\Local\Programs\Python\Python310\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimat
or DecisionTreeClassifier from version 1.0.2 when using version 1.1.2. This might lead to breaking code or invalid results. Use at y
our own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(
C:\Users\User\AppData\Local\Programs\Python\Python310\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimat
or StandardScaler from version 1.0.2 when using version 1.1.2. This might lead to breaking code or invalid results. Use at your own
risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://192.168.1.55:5000
Press CTRL+C to quit
* Restarting with stat
```

AI4Jobs | Kampus Merdeka Batch 3

The image shows a web browser displaying the 'Sistem Prediksi Karyawan Resign' application. The browser tabs include 'titinurhalimah/D...', '(92) WhatsApp', 'Pengumpulan Sel...', 'Jumadi - Class Jun...', 'titinurhalimah/D...', 'Deployment Flask', 'Sistem Prediksi K...', and others. The address bar shows '127.0.0.1:5000/predict'.

The web application interface has a header with the 'orbit' logo and 'Skills For Future Jobs' tagline. The main content area is titled 'Sistem Prediksi Karyawan Resign'. On the left, there is a form with the following fields:

- Lama Bekerja (Tahun)**: Input field with value '2'.
- Jam Kerja Perbulan**: Input field with value '140'.
- Pernah mengalami kecelakaan kerja**: Radio buttons for 'Pernah' and 'Tidak pernah' (selected).
- Kategori Gaji**: Dropdown menu with 'Middle' selected.
- Tingkat Kepuasan**: Slider bar ranging from 0 to 100, with a blue dot at approximately 50.

On the right, a light blue box displays the prediction result: **Hasil Prediksi** and 'Karyawan tersebut diprediksi 99% Tidak Resign'.

Below the browser, the Visual Studio Code editor is open, showing the source code for 'app.py'. The code is a Flask application that uses scikit-learn for prediction. The terminal window shows the output of the application, including a warning about model persistence and a list of HTTP requests and responses.

```

1 import sklearn
2 from flask import Flask, render_template, request
3 from model import load, prediksi
4
5 app = Flask(__name__)
6
7 # Load model dan scaler
8 load()
9
10 @app.route('/')
11 def home():
12     return render_template('index.html')
13

```

The terminal output shows the following log messages:

```

risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(
* Debugger is active!
* Debugger PIN: 134-194-892
127.0.0.1 - - [28/Sep/2022 22:39:11] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [28/Sep/2022 22:39:30] "GET /static/images/kampus-merdeka.png HTTP/1.1" 200 -
127.0.0.1 - - [28/Sep/2022 22:39:30] "GET /static/images/orbit.png HTTP/1.1" 200 -
127.0.0.1 - - [28/Sep/2022 22:40:49] "POST /predict HTTP/1.1" 200 -
127.0.0.1 - - [28/Sep/2022 22:40:49] "GET /static/images/orbit.png HTTP/1.1" 304 -
127.0.0.1 - - [28/Sep/2022 22:40:49] "GET /static/images/kampus-merdeka.png HTTP/1.1" 304 -
192.168.1.55 - - [28/Sep/2022 22:41:33] "GET / HTTP/1.1" 200 -
192.168.1.55 - - [28/Sep/2022 22:41:37] "GET /static/images/orbit.png HTTP/1.1" 200 -
192.168.1.55 - - [28/Sep/2022 22:41:37] "GET /static/images/kampus-merdeka.png HTTP/1.1" 200 -
192.168.1.55 - - [28/Sep/2022 22:41:41] "GET /favicon.ico HTTP/1.1" 404 -
192.168.1.55 - - [28/Sep/2022 22:42:24] "POST /predict HTTP/1.1" 200 -
192.168.1.55 - - [28/Sep/2022 22:42:24] "GET /static/images/orbit.png HTTP/1.1" 304 -
192.168.1.55 - - [28/Sep/2022 22:42:26] "GET /static/images/kampus-merdeka.png HTTP/1.1" 304 -
PS C:\Users\user\Prediksi Karyawan Resign>

```

-
- The screenshot displays the Visual Studio Code interface with a file explorer on the left showing a project named 'PREDIKSI KARYAWAN RESIGN'. The main editor area shows the 'index.html' file, which includes a Bootstrap CSS link and a title 'Sistem Prediksi Karyawan Resign'. The terminal at the bottom shows the command 'python app.py' being executed, resulting in a series of warnings from scikit-learn and Flask, and a message indicating that the application is running on a development server.
- File Edit Selection View Go Run Terminal Help index.html X app.py
- EXPLORER
- ▼ PREDIKSI KARYAWAN RESIGN
 - __pycache__
 - app.cpython-39.pyc
 - model.cpython-39.pyc
 - model.cpython-310.pyc
 - ▼ model
 - model_ds.pkl
 - scaler_ds.pkl
 - static/images
 - kampus-merdeka.png
 - orbit.png
 - ▼ templates
 - index.html
- templates > index.html > html > head
- ```

6 <meta charset="utf-8">
7 <meta name="viewport" content="width=device-width, initial-scale=1">
8
9 <!-- Bootstrap CSS -->
10 <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
11 integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao8Vz1ztQcWf5pd3yD6VhohhuC0mLJASJC" crossorigin="anonymous">
12
13 <title>Sistem Prediksi Karyawan Resign</title>
14 mediumTiti Nurhalimah Hidayah - Cosmic
15
16 <body style="background-color: #F8F9F9;">
17

```
- PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER
- python + - - - - -
- ```

P5 C:\Users\User\Prediksi Karyawan Resign> python app.py
C:\Users\User\AppData\Local\Programs\Python\Python310\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimator DecisionTreeClassifier from version 1.0.2 when using version 1.1.2. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(
C:\Users\User\AppData\Local\Programs\Python\Python310\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimator StandardScaler from version 1.0.2 when using version 1.1.2. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://192.168.1.55:5000
Press CTRL+C to quit
* Restarting with stat
C:\Users\User\AppData\Local\Programs\Python\Python310\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimator DecisionTreeClassifier from version 1.0.2 when using version 1.1.2. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(

```
- Ln 14, Col 2 Spaces: 4 UTF-8 CRLF
- 11:01 PM



AI4Jobs | Kampus Merdeka Batch 3

The screenshot shows the Visual Studio Code interface with a project named 'Prediksi Karyawan Resign'. The Explorer panel on the left shows the file structure, including a 'templates' folder with 'index.html' and 'app.py'. The main editor displays the 'index.html' file, which is a Bootstrap 5 template. The terminal at the bottom shows the output of the application, including a warning about sklearn version compatibility and a list of HTTP requests and responses.

```

index.html - Prediksi Karyawan Resign - Visual Studio Code

EXPLORER
  PREDIKSI KARYAWAN RESIGN
    __pycache__
    app.cpython-39.pyc
    model.cpython-39.pyc
    model.cpython-310.pyc
    model
    model_ds.pkl
    scaler_ds.pkl
    static\images
    kampus-merdeka.png
    orbit.png
    templates
      index.html
      app.py
      model.py

index.html
  6 <meta charset="utf-8">
  7 <meta name="viewport" content="width=device-width, initial-scale=1">
  8
  9 <!-- Bootstrap CSS -->
 10 <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
 11 integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Vz1ztcQTWfSpd3yD65VohhpuuCOMLAS5JC" crossorigin="anonymous">
 12
 13 <title>Sistem Prediksi Karwayan Resign</title>
 14 <b><medium>Titi Nurhalimah Hidayah - Cosmic</medium></b>
 15 </head>
 16
 17 <body style="background-color: #F8F9F9;">

TERMINAL
  C:\Users\user\AppData\Local\Programs\Python\Python310\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimator DecisionTreeClassifier from version 1.0.2 when using version 1.1.2. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to: https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
  warnings.warn(
  C:\Users\user\AppData\Local\Programs\Python\Python310\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimator StandardScaler from version 1.0.2 when using version 1.1.2. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to: https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
  warnings.warn(
  * Debugger is active!
  * Debugger PIN: 134-194-092
  127.0.0.1 - - [28/Sep/2022 22:57:19] "GET / HTTP/1.1" 200 -
  127.0.0.1 - - [28/Sep/2022 22:57:30] "GET /static/images/orbit.png HTTP/1.1" 304 -
  127.0.0.1 - - [28/Sep/2022 22:57:30] "GET /static/images/kampus-merdeka.png HTTP/1.1" 304 -
  127.0.0.1 - - [28/Sep/2022 23:00:13] "POST /predict HTTP/1.1" 200 -
  127.0.0.1 - - [28/Sep/2022 23:00:14] "GET /static/images/orbit.png HTTP/1.1" 304 -
  127.0.0.1 - - [28/Sep/2022 23:00:14] "GET /static/images/kampus-merdeka.png HTTP/1.1" 304 -
  PS C:\Users\user\Prediksi Karyawan Resign>
  
```