(FLASK) PYTHON

Membuat Hello World Dengan Python(FLASK)

```python
from flask import Flask
application = Flask(__name__)

@application.route('/')
def index():
    return 'Hello World'
if __name__ == '__main__':
    application.run(debug=True)
```

Membuat array di python

```python
from flask import Flask
application = Flask(__name__)

@application.route('/home', methods=['GET'])
def home():
    array_data = ['rifky','edward','albert','robert','jhon']
    print(array_data)

if __name__ == '__main__':
    application.run(debug=True)
```

Membuat Template dengan flask python

```python
from flask import Flask , render_template

application = Flask(__name__)

@application.route('/home', methods=['GET'])
def home():
    array_data = ['rifky','edward','albert','robert','jhon']
    return render_template('home.html', rows=array_data)



if __name__ == '__main__':
    application.run(debug=True)
```

Membuat Json Data dari Array Atau API / Application Programming Interface

```python
from flask import Flask , jsonify

application = Flask(__name__)

@application.route('/')
def index():
    return jsonify([
        {"id": "1", "name": "rifqi", "preferences": "asdasd"},
        {"id": "1", "name": "rifqi", "preferences": "asdasd"},
        {"id": "1", "name": "rifqi", "preferences": "asdasd"}
    ])

if __name__ == '__main__':
    application.run(debug=True)
```

Menampilkan data dari API External

```python
from flask import Flask , jsonify
import requests

application = Flask(__name__)

@application.route('/list', methods=['GET'])
def lists():
    api_url = 'https://jsonplaceholder.typicode.com/todos'
    try:
        response = requests.get(api_url)
        response.raise_for_status()
        data = response.json()
        return jsonify(data)
    except requests.exceptions.RequestException as e:
        return jsonify({'error': str(e)}), 500

if __name__ == '__main__':
    application.run(debug=True)
```

Menampilkan Data Array ke HTML

```html
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Home</title>
</head>

<body>
    <h1>Ini Data Dari Array!</h1>
    {% for value in rows %}
    <p>{{ loop.index }} dengan Nama {{value  | capitalize }} </p>
    {% endfor %}
</body>

</html>
```

Menampilkan data dari JSON ke HTML (UPDATED)

```python
from flask import Flask , jsonify , request, render_template
import requests
from flask_cors import CORS

application = Flask(__name__)
CORS(application)

@application.route('/list', methods=['GET'])
def lists():
    api_url = 'https://jsonplaceholder.typicode.com/todos'
    try:
        response = requests.get(api_url)
        response.raise_for_status()
        data = response.json()
        if isinstance(data, list):
            return render_template('bacajson.html', rows=data)
        else :
            return jsonify(data)
```

```python
    except requests.exceptions.RequestException as e:
        return jsonify({'error': str(e)}), 500


if __name__ == '__main__':
    application.run(debug=True)
```

NEXT()

```html
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Baca JSON Data</title>
</head>

<body>
    <h1>Baca Dari Api !</h1>
    {% for value in rows %}
    <p>{{ loop.index }} dengan Nama {{value.title | capitalize }} </p>
    {% endfor %}
</body>

</html>
```

Menampilkan Media/Image di HTML

```html
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Media</title>
</head>
<body>
   <img src="{{ url_for('static', filename='images/images.jpg') }}"
alt="Deskripsi Gambar">
</body>
</html>
```

Membuat Logic di Python IF/ELSE

```html
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Logic</title>
</head>
<body>
    {% set nama = "pattra" %}
    {% if nama == "pattra" %}
    <p> Hallo {{ nama }} </p>
    {% else %}
    <p> Tidak Ada Nama </p>
    {% endif %}
</body>
</html>
```

Import Style.css dan Javascript di Python

```html
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" type="text/css" href="{{url_for('static',
filename='asset/style.css')}}" />
    <title>Logic</title>
</head>
<body>
    {% set nama = "pattra" %}
    {% if nama == "pattra" %}
    <p> Hallo {{ nama }} </p>
    {% else %}
    <p> Tidak Ada Nama </p>
    {% endif %}
    <script src="{{url_for('static',
filename='asset/script.js')}}"></script>
</body>
</html>
```

SOAL

1. Buatlah layout dengan meunggunkana css dan javascript yang sudah kita perlajari sebelumnya, dengan model layout seperti materi sebelumnya
2. Buatlah Grafik dan Table dengan menggunakan data dari python dan grafik dari materi sebelumnya