Matplotlib 15_ Belajar 3D Area Plot

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1 3D Area Plot

Dalam sesi ini kita akan mempelajari 3D Area Plot pada Matplotlib

1.1 1. Import Modules

```
[1]: %matplotlib notebook
```

```
[2]: import matplotlib
     import matplotlib.pyplot as plt
     import numpy as np

     print(matplotlib.__version__)
     print(np.__version__)
```

```
3.3.4
1.20.1
```

1.2 2. Sample Dataset

```
[3]: n = np.linspace(-3.0, 3.0, 100)

     x, y = np.meshgrid(n, n)
     z = np.sqrt(x**2, y**2)

     print(x.shape)
     print(y.shape)
     print(z.shape)
```

```
(100, 100)
(100, 100)
(100, 100)
```

1.3 3. 3D Wireframe

```
[4]: fig = plt.figure()
     ax = plt.axes(projection='3d')

     ax.plot_wireframe(x, y, z, color='orange')

     ax.set_xlabel('x')
     ax.set_ylabel('y')
     ax.set_zlabel('z')
     ax.set_title('3D Wireframe')

     plt.show()
```

<IPython.core.display.Javascript object>

<IPython.core.display.HTML object>

1.4 4. 3D Surface Plot

```
[5]: fig = plt.figure()
     ax = plt.axes(projection='3d')

     ax.plot_surface(x, y, z, color='orange')

     ax.set_xlabel('x')
     ax.set_ylabel('y')
     ax.set_zlabel('z')
     ax.set_title('3D Wireframe')

     plt.show()
```

<IPython.core.display.Javascript object>

<IPython.core.display.HTML object>

```
[6]: fig = plt.figure()
     ax = plt.axes(projection='3d')

     ax.plot_surface(x, y, z, cmap='viridis')

     ax.set_xlabel('x')
     ax.set_ylabel('y')
     ax.set_zlabel('z')
     ax.set_title('3D Wireframe')

     plt.show()
```

<IPython.core.display.Javascript object>

```
<IPython.core.display.HTML object>
```