Pygal Tutorial

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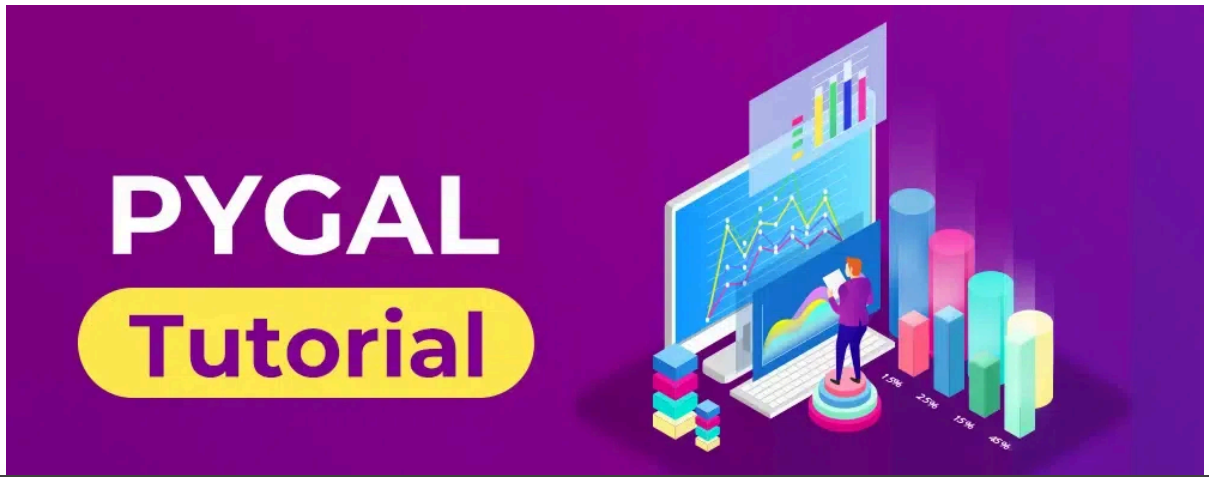
Pygal is a Python library and It is an open-source that is used for creating visual and interactive charts. This library is based on SVG technology, which ensures that the charts are scalable without any loss in quality. Various visualization packages in Python can be used to create a range of charts, graphs, and plots. Pygal is one of them which is an open-source library that offers highly interactive plots. Additionally, Pygal generates SVG images of the graphs and plots, allowing for easy customization. This library is user-friendly and can create graphs with just a few lines of code.



Pygal creates plots like a bar, line, histogram, etc, and due to the high scalability of the images of the plot downloaded as SVG.

In this **Pygal Tutorial**, you'll learn all the topics of Pygal like: *Pygal Chart Type, Radar, Box, Dot, Funnel Chart, and Pygal Chart Configuration*. we will explore a variety of charts that can create using Pygal.

What is Pygal?

Pygal is a Python module that is mainly used to build SVG (Scalar Vector Graphics) graphs and charts. SVG is a vector-based graphic in the XML format

that can be edited in any editor. Pygal can create graphs with minimal lines of code that can be easy to understand and write.

Data visualization is a powerful tool that uses well-organized pictorial representations of data to make it easier to understand, observe, and analyze.

Pygal Chart Type

- Introduction and Installation
- Line
    - Basic Line Chart
    - Stacked
    - Time
- Bar
    - Basic Bar Chart
    - Stacked
- Histogram
- Scatter Plot
- Pie
    - Basic Pie Chart
    - Multi-series pie
    - Donut
    - Half pie
- Radar
- Box
- Dot
- Funnel Chart
- SolidGauge
- Gauge
- Pyramid
- Treemap
- World map

Pygal Chart Configuration

- Built-in Styles
- Custom Styles

- Sizing
    - width and height
    - Spacing and Margin
- Labels
    - x_labels, y_labels and label_rotation
    - show_x_labels or show_y_labels
- Legend
- Axis
- Tooltip

Conclusion

Data visualization is a powerful tool for understanding patterns, trends, and insights hidden within datasets. Pygal, with its simple syntax and versatile features, empowers developers to create stunning visualizations that effectively communicate information to the audience. Whether you are a beginner or an experienced programmer, Pygal provides an excellent platform to unleash your creativity in data representation.

Pygal Tutorial – FAQs

1. Can I use Pygal with Django or Flask?

Yes, Pygal can be integrated seamlessly with web frameworks like Django or Flask to render charts dynamically in web applications.

2. Is Pygal suitable for real-time data visualization?

Pygal is not optimized for real-time data visualization. For real-time scenarios, consider using libraries like D3.js or Plotly.

3. Can I create responsive charts with Pygal?

Yes, you can create responsive charts by embedding them in HTML using Pygal's built-in CSS classes or by defining custom styles.

4. Are there any limitations to the amount of data Pygal can handle?

Pygal can handle large datasets, but extremely massive datasets may impact performance. It's advisable to optimize data before rendering charts.

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