New Component Proposal

**TITLE:** LINE GRAPH

Description :

A **line graph** is a type of chart used to display data points in a continuous manner, often showing how a variable changes over time. It consists of a series of data points, each represented by a dot or a marker, connected by straight lines. Line graphs are particularly useful for visualising trends, patterns, and fluctuations in data across different periods or categories.

Key features of a line graph:  
1. X-axis (horizontal) typically represents the time or independent variable.  
2. Y-axis (vertical) represents the dependent variable or the quantity being measured.  
3. Data points are plotted based on their corresponding X and Y values.  
4. Lines connect the data points to illustrate the trend.

A graph with red and blue lines

Description automatically generated

Dependency:

Used Recharts (https://recharts.org/en-US) library for FAB development.

Configuration :

1. The title, chart width, chart heightare custom made and can be changed as per need.

Also we have options of modifying the width type to % or px as needed.

A screenshot of a chart

Description automatically generated

1. The horizontal and vertical grid lines**, opacity** can be handled dynamically as well.

A screenshot of a computer

Description automatically generated

1. The X-axis label, gridlines, tick marks, auto append and auto prepend are custom configured and can be modified as need be. Same applies for Y-axis

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

1. Series is a dropdown where we can select how many lines we want to generate in the line graph,

The primary and secondary column keys have been configured, along with the column spacing.

A screenshot of a computer

Description automatically generated

1. The data source is created which has the data key (x-axis value)

A screenshot of a list

Description automatically generated

1. The data which needs to be mapped has been configured here,  
   We can either import or directly add the values here.  
   Also the data model which has the key values, and their types are configured here.

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

Usage :

Line graphs are commonly used in areas like economics, science, and business to track changes over time, such as stock prices, weather data, or sales performance

Real-Time Scenarios:

* Sales Performance

A retail company might analyze its monthly sales data to determine if sales are increasing during holiday seasons or decreasing due to external factors, helping with inventory planning.

* Sports Performance

Coaches or analysts use line charts to evaluate athletes' performances, identify areas for improvement, and monitor progress throughout the season