

LB SyDL - 2. Modules

Researchers can visualize their data in different ways, mainly depending on their need and their data types. Thus, different modules were developed. Along with these modules, a set of configuration options are under continuous development.

- Modules
 - Table
 - Bar Chart
 - Scatter plot
- Modules' configuration features
- Futur improvements

Modules

Table

A **table** is a structured arrangement of data in rows and columns, allowing easy comparison and analysis of information. Tables are commonly used to present data in a clear and concise manner, making it easier to read and interpret.

Use-case n°1: Summarizing Information

- **Given** a user can visualize attributes in a table,
- **When** he needs to summarize data for a presentation,
- **Then** he uses a table to condense the data into key figures

Use-case n°1: Comparing Data

- **Given** a user can visualize attributes in a table,
- **When** he wants to compare these attributes for different objects,
- **Then** he uses a table to present the data side-by-side for easy comparison.

Bar Chart

A **bar chart** is a graphical representation of data using rectangular bars. The length or height of each bar is proportional to the value it represents. Bar charts are commonly used to compare different categories or to track changes over time.

Use-case n°1: Comparing Data

- **Given** that a user can visualize his data on a bar chart,
- **When** he wants to compare an attribute value for several objects,
- **Then** he uses a bar chart to visually represent and compare this attribute's values.

Scatter plot

A **scatter plot** is a type of data visualization that displays values for typically two variables for a set of data. The data is displayed as a collection of points, each representing the values of two variables. The position of each point on the horizontal and vertical axis indicates the values for an individual data point. Scatter plots are used to observe relationships between variables and identify patterns or correlations.

Use-case n°1: Identifying Correlations

- **Given** a user can visualize 2 attributes on a scatter plot,
- **When** he wants to determine if there is a relationship between these two variables,
- **Then** he uses a scatter plot to visualize the data points and identify any correlation.

Use-case n°2: Detecting Outliers

- **Given** a user can visualize 2 attributes in a scatter plot,
- **When** he wants to identify any outliers in the data,
- **Then** he uses a scatter plot to display the data points and easily spot any anomalies.

Use-case n°3: Analyzing Trends

- **Given** a user can visualize 2 attributes in a scatter plot,
- **When** he wants to analyze trends over time,
- **Then** he uses a scatter plot to visualize the data points and observe any trends or patterns.

Modules' configuration features

- LB SyDL Graphs features
 - Axis selection
 - Zoom on charts
- LB SyDL Table Features
 - Data Cell Merge from left to right
 - Export
 - Header and first column always visible
 - Move table columns
 - Pagination system
 - Show/Hide table attributes
 - Sorting

Futur improvements

Development of additional modules:

- Boxplot
- Pie chart
- Heatmap
- Spider chart