

CS251: Software Engineering I 2014-2015

Project Title : Chart Component



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Problem Statement

Design and implement Chart Component. Chart Component responsible for holding all necessary properties about the different types of chart. Chart Component organizes all data of chart to be easily modeling.

PROJECT DESCRIPTION

HOLDING DATA

Chart Component responsible for holding data points, annotations, color, label and various necessary properties

- The chart may include a legend. A legend contains a list of the variables appearing in the chart. Chart has legend to clear its data.
- The chart may include an axis. An axis contains minimum and maximum value for all data. Sometimes axis contains category not a range. Line chart has two axis one vertical and other horizontal but pie chart have no axis.
- Chart allowed to be fill with data. Data may be single value that means have one value for x-axis and other for y-axis. Data may be multiple values that means have more than 2-value (x-axis, y-axis)[1]. All related data should be grouped and have their proprieties like color to be easy differentiate.

CHART TYPES

Chart component support various types of chart [line chart, pie chart, bubble chart]. Chart component allows easy addition of new charts types.

- A **pie chart** shows percentage values as a slice of a pie.
- A **line chart** is a two-dimensional scatterplot of ordered observations where the observations are connected following their order.

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- A **bubble chart** is a two-dimensional scatterplot where a third variable is represented by the size of the points.

CHART VIEWS

Chart component provides drawing to supported charts [line chart, pie chart, bubble chart]. Chart component doesn't support any GUI to enter data. Chart component will use a main class to enter the data.

REFERENCE

[1] <https://developers.google.com/chart/interactive/docs/gallery/bubblechart>