Abstract

\texttt{pgf-pie} is a LaTeX package for drawing pie chart (and variant charts). As stated by its name, it is based on a very popular graphic package \texttt{PGF/TikZ}. This document presents the usage of \texttt{pgf-pie} and collects some pie charts as examples. \texttt{pgf-pie} can be downloaded from https://github.com/pgf-tikz/pgf-pie.

Contents

1 Usage .............................. 1
  1.1 First Pie .................................. 1
  1.2 Position, Rotation, Size ...................... 1
  1.3 Color .................................. 2
  1.4 Explode .................................. 3
  1.5 Angle of slices ............................. 3
  1.6 Slice order ............................... 3
  1.7 Text .................................. 3
    1.7.1 Number ................................ 3
    1.7.2 Label text ................................ 4
  1.8 More about style ............................ 5
    1.8.1 shadow ................................ 5
2 Variant Charts .......................... 5
  2.1 Polar area diagram ......................... 5
  2.2 Square .................................. 5
  2.3 Clouds .................................. 6
3 Examples .................................. 6
4 Acknowledgements .......................... 6

1 Usage

1.1 First Pie

\texttt{\textbackslash pie} is the only command that provided by \texttt{pgf-pie}. The argument is a list of number and text combination in the formate of \texttt{number/text}, i.e. 10/A, 20/B, 30/C, 40/D. The result is shown in figure 1.

1.2 Position, Rotation, Size

The center of chart can be set by \texttt{pos}, default is \texttt{(0,0)}. The chart can be rotated by setting \texttt{rotate} (in degrees). The size of chart can be set by \texttt{radius}, default is 3.
1.3 Color

The color can be specified by `color`, the default color wheel is shown in figure 2.
1.4 Explode

\begin{tikzpicture}
% explode list
\pie[explode={0,0,0,0.1}]{10/A, 20/B, 30/C, 40/D}
% explode all
\pie[pos={(0,0)}, explode=0.1]{10/A, 20/B, 30/C, 40/D}
\end{tikzpicture}

1.5 Angle of slices

The value of \texttt{sum} indicates the sum of all data in the chart, it is 100 by default. It can be calculated automatically when \texttt{auto} is set. Then the angle of slices are determined by number value and \texttt{sum}.

\begin{tikzpicture}
\pie[sum=auto, after number=, radius=2]{33/Boys, 7/Girls}
\pie[pos={(0,0)}, sum=40, after number=, radius=2]{33/Boys}
\end{tikzpicture}

1.6 Slice order

The slices order direction can be set to clockwise by setting \texttt{change direction}, default is counterclockwise.

\begin{tikzpicture}
\pie[radius=2]{10/A, 20/B, 30/C, 40/D}
\pie[pos={(0,0)}, change direction, radius=2]{10/A, 20/B, 30/C, 40/D}
\end{tikzpicture}

1.7 Text

1.7.1 Number

Two parameters can be used to decorate number: \texttt{before number} and \texttt{after number}. Both are empty by default, but if \texttt{sum=100}, \texttt{after number} will be set to \% automatically if user doesn’t set it.

\begin{tikzpicture}
\pie[before number=\£, after number=\%]{10/A, 20/B, 30/C, 40/D}
\end{tikzpicture}

The number also can be hide by \texttt{hide number}:
1.7.2 Label text

The value of text can be label (default), pin, inside or legend.
1.8 More about style
1.8.1 shadow

2 Variant Charts
2.1 Polar area diagram
The polar area diagram is similar to a usual pie chart, except sectors are equal angles and differ rather in how far each sector extends from the center of the circle.

2.2 Square
Note: *explode* has no affects in square chart.

### 2.3 Clouds

\begin{tikzpicture}
\pie[cloud, text=inside, scale font](10/A, 20/B, 30/C, 40/D)
\end{tikzpicture}

### 3 Examples

### 4 Acknowledgements

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