Flexdashboard

The goal of **flexdashboard** is to make it easy to create interactive dashboards for R, using R Markdown.

- Use R Markdown to publish a group of related data visualizations as a dashboard.
- Support for a wide variety of components including html/widgets; base, lattice, and grid graphics; tabular data; gauges and value boxes; and text annotations.
- Flexible and easy to specify row and column-based <u>layouts</u>. Components are intelligently re-sized to fill the browser and adapted for display on mobile devices.

- <u>Storyboard</u> layouts for presenting sequences of visualizations and related commentary.
- Optionally use **Shiny** to drive visualizations dynamically.
- Optionally use <u>bslib</u> to easily <u>customize main colors, fonts, and more</u>.

Learn more about flexdashboard: https://pkgs.rstudio.com/flexdashboard

Installation

Install the **flexdashboard** package from CRAN as follows:

install.packages("flexdashboard")

If you want to use the development version of the **flexdashboard** package, you can install the package from GitHub via the <u>remotes</u> package:

remotes::install_github('rstudio/flexdashboard')

Dashboard basics

Components

You can use flexdashboard to publish groups of related data visualizations as a dashboard. A flexdashboard can either be static (a standard web page) or dynamic (a Shiny interactive document). A wide variety of components can be included in flexdashboard layouts, including:

- 1.Interactive JavaScript data visualizations based on httmlwidgets.
- 2.R graphical output including base, lattice, and grid graphics.
- 3. Tabular data (with optional sorting, filtering, and paging).
- 4. Value boxes for highlighting important summary data.
- 5. Gauges for displaying values on a meter within a specified range.
- 6. Text annotations of various kinds.

SINGLE COLUMN (FILL)

Dashboards are divided into columns and rows, with output components delineated using level 3 markdown headers (###).

By default, dashboards are laid out within a single column, with charts stacked vertically

within a column and sized to fill available browser height. For example, this layout defines a single column with two charts that fills available browser space:

```
1 ---
2 title: "Single Column (Fill)"
3 output:
4   flexdashboard::flex_dashboard:
5    vertical_layout: fill
6 ---
7
8 ### Chart 1
9
10 ```{r}
11
12 ```
13
14 ### Chart 2
15
16 ```{r}
17
18 ```
```



MULTIPLE COLUMNS

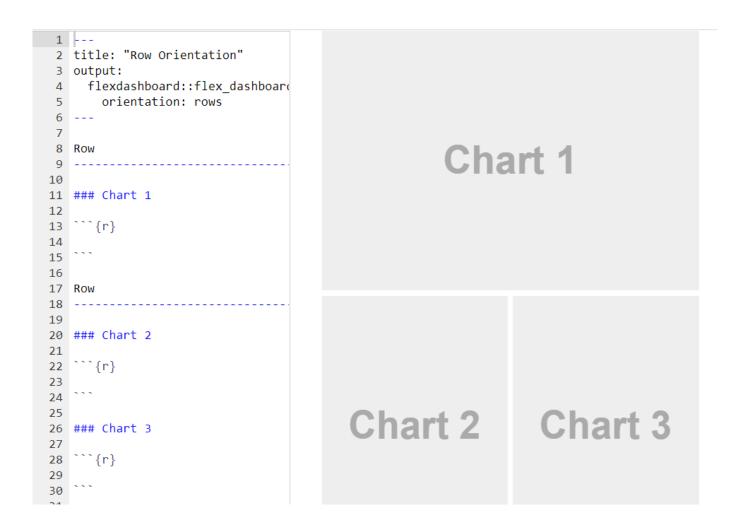
To lay out charts using multiple columns you introduce a level 2 markdown header (------) for each column.

For example, this dashboard displays 3 charts split across two columns:



ROW ORIENTATION

You can also choose to orient dashboards row-wise rather than column-wise by specifying the orientation: rows option. For example, this layout defines two rows, the first of which has a single chart and the second of which has two charts:



THEMES

A variety of themes are available to modify the base appearance of flexdashboard. Available themes include:

- <u>Cosmo</u> (The "cosmo" theme is used when "default" is specified. These themes are all based on the themes available in the <u>R Markdown</u> package.)
- bootstrap
- cerulean
- journal
- flatly
- readable
- spacelab
- united
- lumen
- paper
- sandstone
- simplex
- Yeti