

R Markdown summary

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Introduction to R Markdown

R Markdown is an authoring framework for data science, combining code, narrative, and visualizations in a single, reproducible document. It allows users to seamlessly blend Markdown for formatting with R code chunks, enabling dynamic reports, presentations, and websites.

Key Functionalities of R Markdown

R Markdown is highly versatile, offering several key functionalities for data scientists and analysts:

- **Dynamic Document Creation:** R Markdown supports integrating code and text, enabling users to write code and instantly view its output.
- **Reproducible Analysis:** Since the code and documentation are in one place, R Markdown documents are highly reproducible. They can be rerun at any time to regenerate the document with updated data.
- **Visualizations:** R Markdown can embed plots and visualizations directly in the document, which is essential for data reporting and analysis.
- **Support for Various Output Formats:** Users can knit their documents into various formats, such as HTML, PDF, Word, or even slideshows.
- **Customization:** R Markdown allows for extensive customization using YAML headers and CSS, so users can modify the layout, style, and format of their documents.

Example of a Plot in R Markdown

Here's an example of how R Markdown can dynamically generate a plot:

```
# Generate a sample plot
plot(cars, main = "Speed vs Stopping Distance", col = "blue")
```

Speed vs Stopping Distance

