Explore and Summarize Data

Student Notes Code Review Project Review

Does Not Meet Specifications

Code Functionality

SPECIFICATION
All code is functional (e.g. No Error is produced and RMD document is not prevented from bring knit.)

MEETS SPECIFICATION

SPECIFICATION
The project almost never uses repetitive code where a function would be more appropriate. The code references variables by name instead of using constants or column numbers.

MEETS SPECIFICATION

Reviewer Comments
Please consider to include functions to simplify your code or reduce repetitions.

Requirements to exceed the specification >

Project Readability

SPECIFICATION
All complex code is adequately explained with comments. It is always clear what the code is doing.

EXCEEDS SPECIFICATION

Reviewer Comments
Non trivial code are commented or explained in the html text.

Requirements to exceed the specification >

SPECIFICATION
The code uses formatting techniques to improve code readability. All lines are shorter than 80 characters.

DOES NOT MEET SPECIFICATION

Reviewer Comments

There are some places where you exceed the maximum line length. This seems picky but the limit is widespread convention that ensure that future programmers can read your code easily no matter what their text editor and window size preferences are. One way to hem things in is by breaking up lists with line breaks. RStudio does the indentation automatically when you add a line break in the middle of a parameter list. RStudio also has a built in feature for finding overly long lines. In the Code Editing section of the preferences there's an option called "Show margin" that puts a line length indicator in the code editor.

Requirements to exceed the specification ›

SPECIFICATION

Markdown syntax is used in the code to improve readability of the knitted file.

There are no large sections of the knitted HTML file with bad readability.

DOES NOT MEET SPECIFICATION

Reviewer Comments

Unless the code include any complicated data transformations that would give context to the plots and analysis, please avoid displaying chunks of code in your HTML document, this also imply fo warnings messages. The final HTML document should include results from the analysis, figures and discussion. You can easily do it by setting the parameter "echo=FALSE" as in this example: "{r echo=FALSE, message=FALSE, warning=FALSE, packages}"

Requirements to exceed the specification ›

Quality of Analysis

SPECIFICATION

The project appropriately uses univariate, bivariate, and multivariate plots to explore most of the expected relationships in the data set.

DOES NOT MEET SPECIFICATION

Reviewer Comments

The report include different chart types that explorer many aspects in the data set. In the bivariate section, it is very good aproach to use the correlation matrix or in this case the ggpairs figure, to chose the more relevant or interesting relations in the data set. However after you chose the relations that interest you, please include a separate figure with a comprehensive discussion and statistics for each relation.

How satisfied are you with this feedback?

Resubmit Project

SPECIFICATION

Questions and findings are placed between blocks of R code regularly so it is clear what the student was thinking throughout the analysis.

MEETS SPECIFICATION

Reviewer Comments

The discussion under each chart include relevant questions and interesting findings.

SPECIFICATION

Reasoning is provided for the plots made throughout the analysis. Plots made follow a logical flow. Comments following plots accurately reflect the plots' contents.

MEETS SPECIFICATION

Reviewer Comments

The analysis follow a logical flow where the results of one analysis lead to another.

SPECIFICATION

The project contains at least 20 visualizations. The visualizations are varied and show multiple comparisons and trends. Relevant statistics such as means, medians, quartiles, or confidence intervals are computed throughout the analysis when an inference is made about the data.

DOES NOT MEET SPECIFICATION

Reviewer Comments

The report include many figures that depict comparisons, trends and relation between features. However in some places more quantification of the results will boost the significant of the report. For example to quantify the distribution of each feature, please include the relevant mean median and quartile in the discussion under each histogram. Despite the fact that you include all or most of the correlation values in the beginning of the bivariate section, it will be useful to include the relevant correlation value in the discussion under each figure that depict relations between features.

Requirements to exceed the specification ›

SPECIFICATION

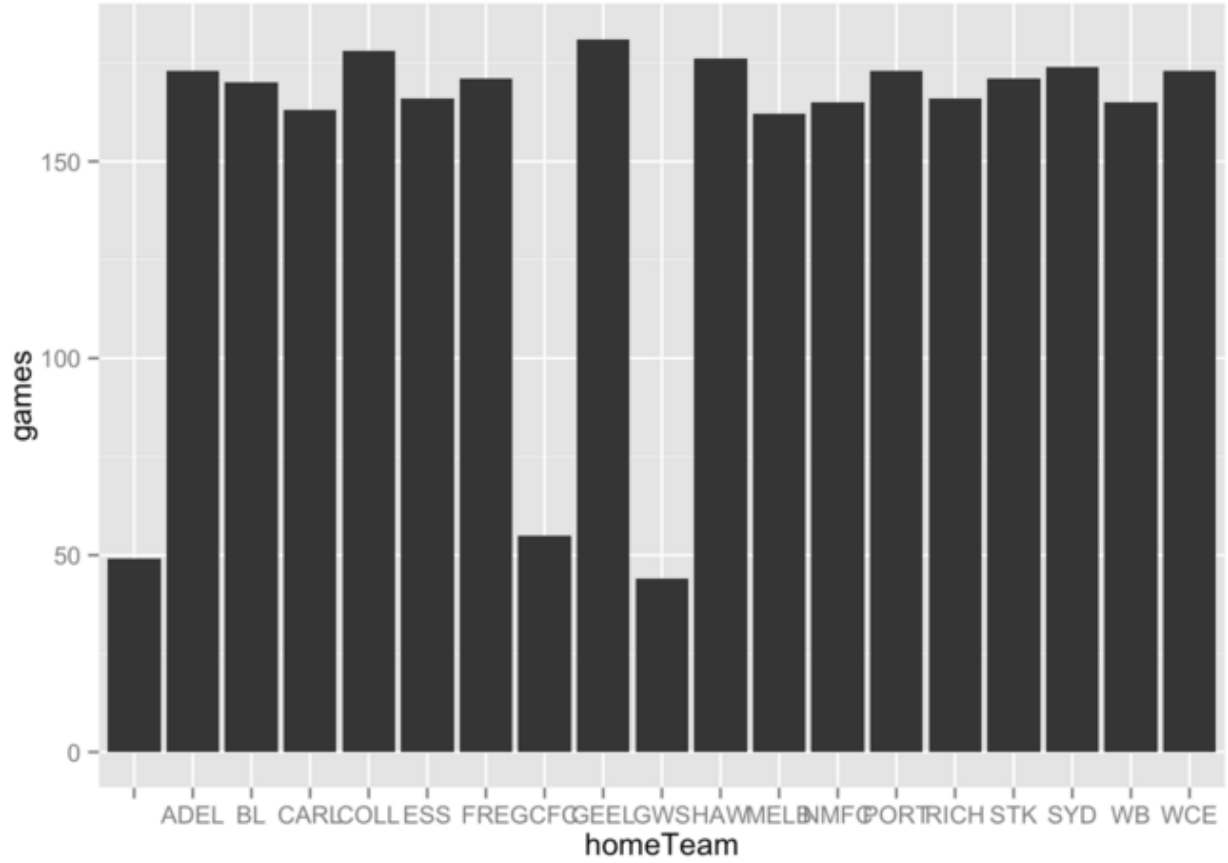
Visualizations made in the project depict the data in an appropriate manner that allows plots to be readily interpreted. Choices of plot type and parameters aid interpretability.

DOES NOT MEET SPECIFICATION

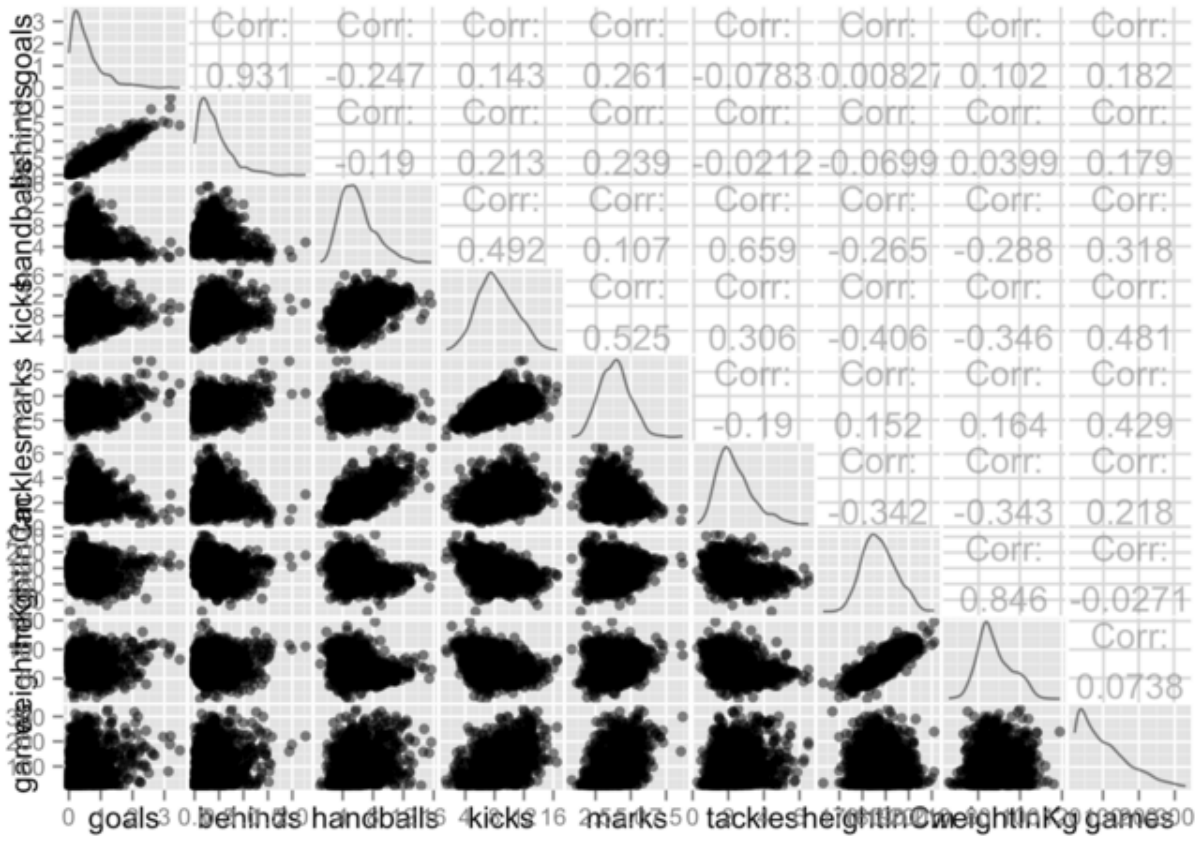
Reviewer Comments

Most of the charts are well done, so I have only few comments here.

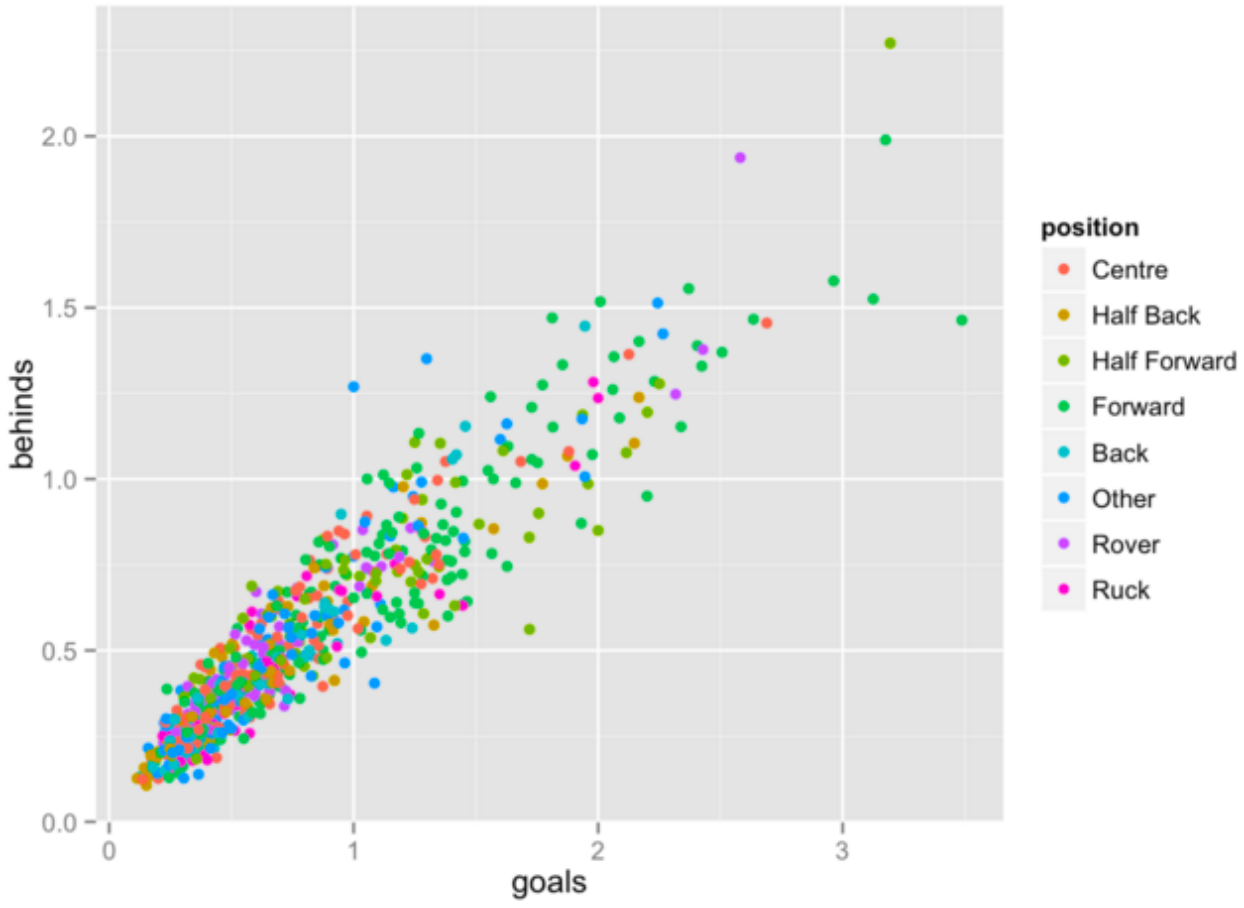
It is important that all the axis labels , ticks color legends etc, will be clear and readable. For example in the figure below, you can make the x-axis ticks readable by orient the text vertically.



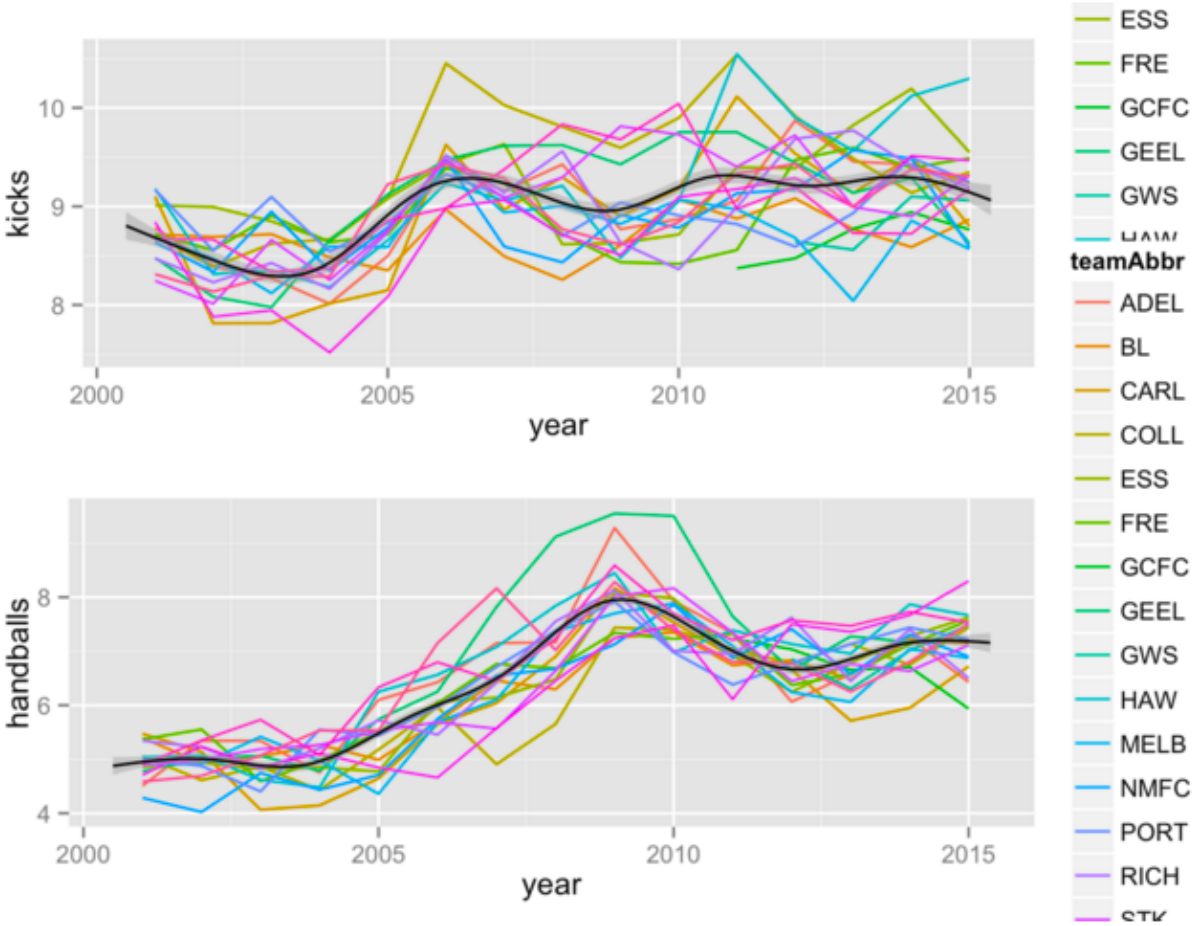
The labels for x and y axis and the correlation values in the ggpairs figure are a little difficult to read. You can fix that quite easily by removing the axis ticks ("theme(axis.text = element_blank())") and choosing a short descriptive names for each feature. You can also decrease the font size of the correlations values. This link may be helpful: http://stackoverflow.com/questions/8599685/how-to-change-correlation-text-size-in-ggpairs . In addition you can increase the figure size, this link might be useful : https://rstudio.github.io/dygraphs/r-markdown.html . yet another option is to use other representations of correlations matrixes: http://rgm3.lab.nig.ac.jp/RGM/R_rdfile?f=GGally/man/ggcorr.Rd&d=R_CC



In the multivariate scatter plot, please include additional layer of a regression line to enhance the difference between different categories. For example in the figure below the position . another way to help the separation is to include the correlation value for each position in the discussion under the chart.



In the figure below , I do not think that the team addr is really informative, we canot really follow after each color, why not using a box plot instead for each year?



Requirements to exceed the specification ›

Final Plots and Summary

SPECIFICATION

The project includes a Final Plots and Summary section containing three plots and commentary. All plots in this section reflect what has been explored in the main body of the analysis.

DOES NOT MEET SPECIFICATION

Reviewer Comments

The report dose not include final plot section

SPECIFICATION

The plots are well chosen and the plots fulfill at least 2 of the criteria. The plots are varied and reveal interesting trends and relationships.

Given criteria:

- Draw comparisons.
- Identify trends.
- Engage a wide audience.
- Explain a complicated finding.

- Clarify a gap between perception and reality.
- Enable the reader to digest large amounts of information.

DOES NOT MEET SPECIFICATION

Reviewer Comments
The report dose not include final plot section

Requirements to exceed the specification ›

SPECIFICATION
All plots have appropriately selected variables and are plotted in a way that accurately conveys the data/information (i.e findings in Final Plot 1 do not depend on the findings of Final Plot 2).

DOES NOT MEET SPECIFICATION

Reviewer Comments
The report dose not include final plot section

SPECIFICATION
All plots are labeled appropriately (axis labels, plot titles, axis units) and can be read and interpreted easily. Plots are scaled appropriately.

DOES NOT MEET SPECIFICATION

Reviewer Comments
The report dose not include final plot section

SPECIFICATION
The reasoning and findings from each plot are explained and the text about each plot is descriptive enough to stand alone. Comments reflect the contents of the plots that they are associated with.

DOES NOT MEET SPECIFICATION

Reviewer Comments
The report dose not include final plot section

Requirements to exceed the specification ›

Reflection

SPECIFICATION
The project includes a Reflection section discussing the analysis performed.

DOES NOT MEET SPECIFICATION

Reviewer Comments
The report dose not include Reflection section

SPECIFICATION

The section reflects on how the analysis was conducted and reports on the struggles and successes throughout the analysis. The section provides at least one idea or question for future work.

DOES NOT MEET SPECIFICATION

Reviewer Comments

The report dose not include Reflection section

Requirements to exceed the specification >

Additional Reviewer Comments

I hope my comments will help.

Download project

Learn the best practices for revising and resubmitting your project.

Have a question about your review? Email us at review-support@udacity.com and include the link to this review.