

# NBA Shot Data

Sameer Baloch

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# Set the working directory to "/cloud/project"
setwd("/cloud/project")

# Set the random number generation method to "Rounding"
RNGkind(sample.kind="Rounding")

# Clear the workspace by removing all objects
rm(list=ls())

# Install the "BasketballAnalyzeR" package
install.packages("BasketballAnalyzeR")

# Load the "BasketballAnalyzeR" package
library(BasketballAnalyzeR)

# List available datasets in the "BasketballAnalyzeR" package
data(package="BasketballAnalyzeR")

# Create a new object "PbP" by manipulating the "PbP.BDB" dataset
PbP <- PbPmanipulation(PbP.BDB)

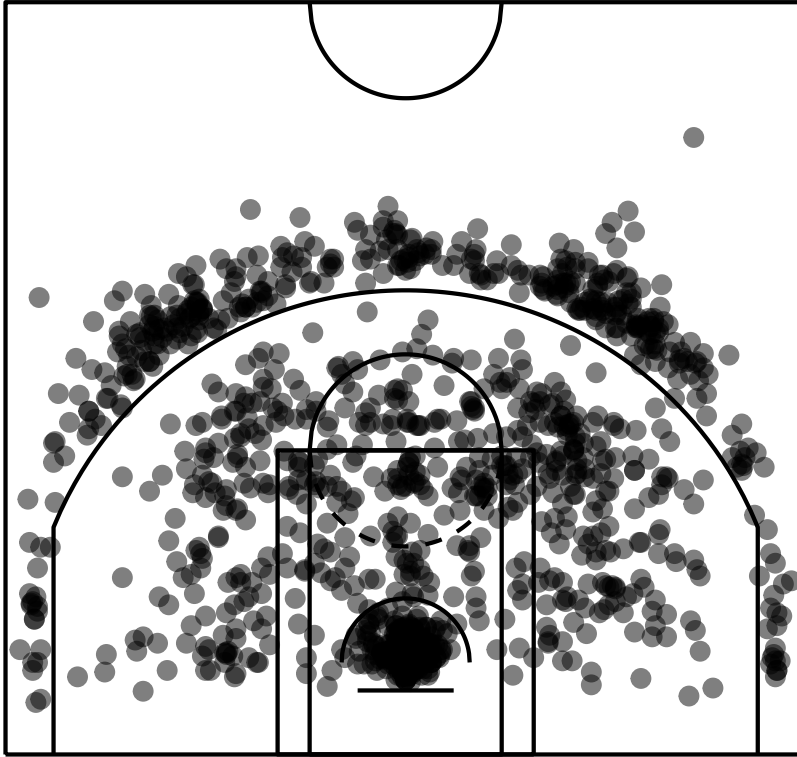
# Clear the workspace again
rm(list=ls())

# Create another object "PbP" by manipulating the "PbP.BDB" dataset again (redundant)
PbP <- PbPmanipulation(PbP.BDB)

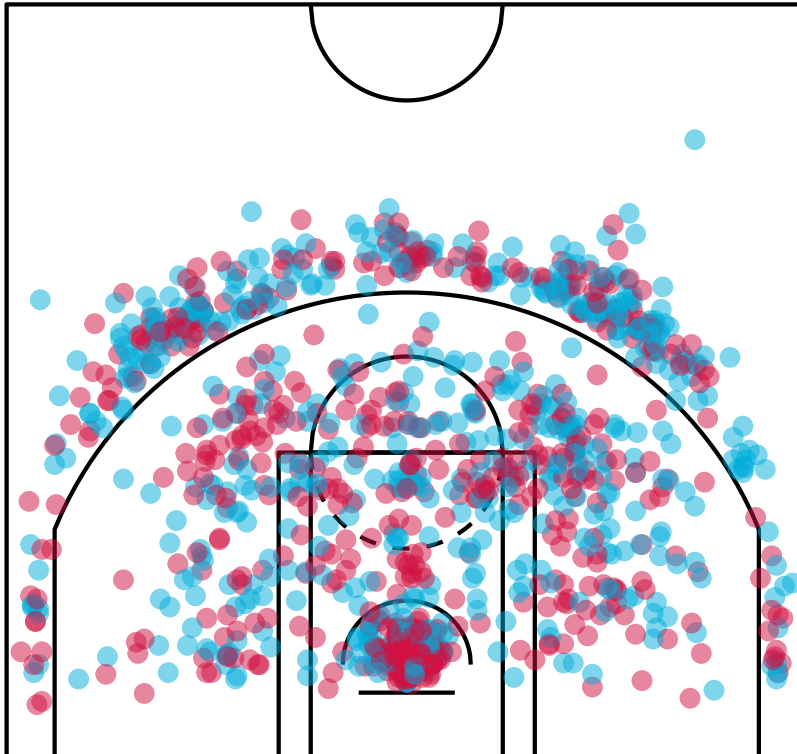
# Subset "PbP" data to create "subdata" containing records for "Kevin Durant"
subdata <- subset(PbP, player=="Kevin Durant")

# Create new variables "xx" and "yy" by transforming the original_x and original_y data
subdata$xx <- subdata$original_x/10
subdata$yy <- subdata$original_y/10-41.75

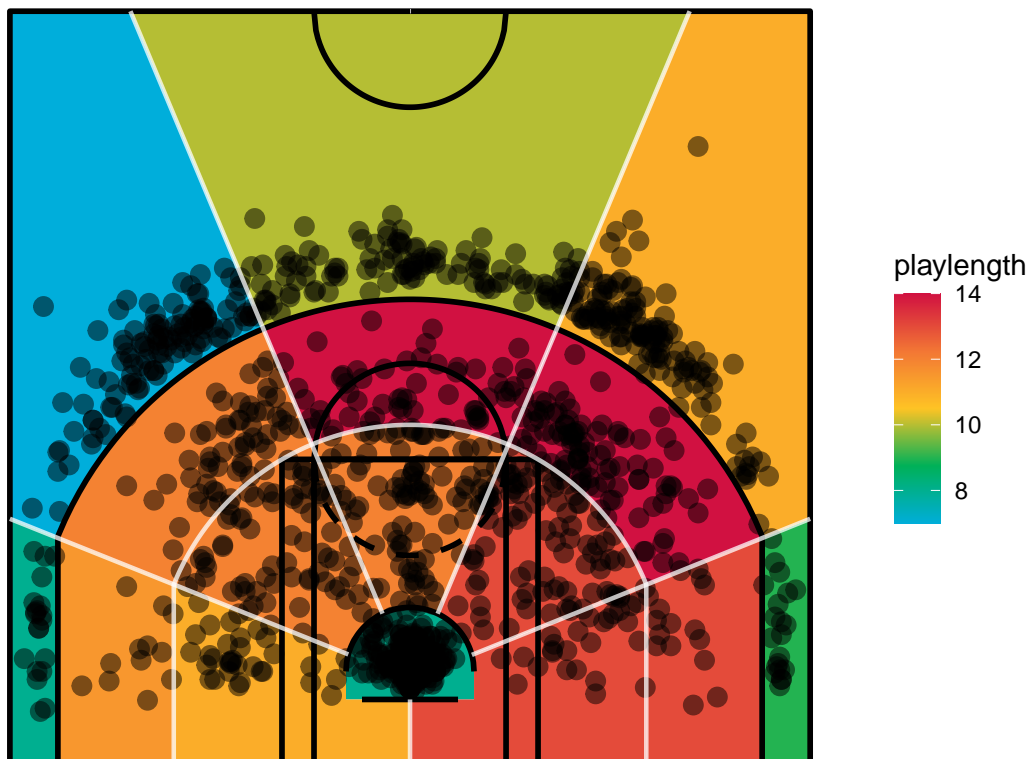
# Create a shot chart with scatter points
shotchart(data=subdata, x="xx", y="yy", type=NULL, scatter=TRUE)
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# Create a shot chart with scatter points and different colors based on the "result" variable
shotchart(data=subdata, x="xx", y="yy", z="result", type=NULL, scatter=TRUE)
```



```
# Create a shot chart with sectors and scatter points using the "playlength" variable
shotchart(data=subdata, x="xx", y="yy", z="playlength", num.sect=5, type="sectors", scatter=TRUE)
```



# Create a shot chart with sectors but without scatter points and specify the "result" variable  
`shotchart(data=subdata, x="xx", y="yy", z="playlength", num.sect=5, type="sectors", scatter=FALSE, result="result")`

