

## PS5 for Dr Ransom S19

Alex Hinshaw

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```
library(rvest)

## Warning: package 'rvest' was built under R version 3.5.2

## Loading required package: xml2

## Warning: package 'xml2' was built under R version 3.5.2

webpage <- read_html("https://en.wikipedia.org/wiki/Kyler_Murray")
webpage

## {xml_document}
## <html class="client-nojs" lang="en" dir="ltr">
## [1] <head>\n<meta http-equiv="Content-Type" content="text/html; charset=
...
## [2] <body class="mediawiki ltr sitedir-ltr mw-hide-empty-elt ns-0 ns-sub
...

results <- webpage %>% html_nodes(".mw-parser-output")
results

## {xml_nodeset (1)}
## [1] <div class="mw-parser-output">\n<p class="mw-empty-elt">\n\n</p>\n<t
...

xml_contents(results)

## {xml_nodeset (67)}
## [1] <p class="mw-empty-elt">\n\n</p>
## [2] \n
## [3] <table class="infobox biography vcard" style="width:22em"><tbody>\n
...
## [4] <p><b>Kyler Cole Murray</b> (born August 7, 1997) is an American co
...
## [5] <p>The <a href="/wiki/Oakland_Athletics" title="Oakland Athletics">
...
## [6] \n
## [7] <div id="toc" class="toc">\n<input type="checkbox" role="button" id
...
## [8] \n\n
## [9] <h2><span class="mw-headline" id="High_school_career">High school c
...
## [10] \n
## [11] <p>Murray was born in <a href="/wiki/Bedford,_Texas" title="Bedford
```

```

...
## [12] <p>Murray was ranked by <a href="/wiki/ESPN" title="ESPN">ESPN</a>,
...
## [13] <p>Murray also plays <a href="/wiki/Baseball" title="Baseball">base
...
## [14] \n
## [15] <dl><dt>High school statistics</dt></dl>\n
## [16] <table class="wikitable" style="text-align:center;"><tbody>\n<tr>\n
...
## [17] <table class="wikitable" style="font-size:90%;">\n<caption>US <a hr
...
## [18] <h2><span class="mw-headline" id="College_career">College career</s
...
## [19] \n
## [20] <h3>\n<span id="Texas_A.26M_.282015.29"></span><span class="mw-head
...
## ...

```

I couldn't really get this to work as I had intended. I wanted to parse the text regarding Kyler and the MLB from the text concerning Kyler and the NFL.

## API Portion

```
library(quantmod)
```

```
## Loading required package: xts
```

```
## Loading required package: zoo
```

```
##
```

```
## Attaching package: 'zoo'
```

```
## The following objects are masked from 'package:base':
```

```
##
```

```
##      as.Date, as.Date.numeric
```

```
## Loading required package: TTR
```

```
## Version 0.4-0 included new data defaults. See ?getSymbols.
```

```
library(ggplot2)
```

```
getSymbols("GOOG", src = "yahoo")
```

```
## 'getSymbols' currently uses auto.assign=TRUE by default, but will
```

```
## use auto.assign=FALSE in 0.5-0. You will still be able to use
```

```
## 'loadSymbols' to automatically load data. getOption("getSymbols.env")
```

```
## and getOption("getSymbols.auto.assign") will still be checked for
```

```
## alternate defaults.
```

```
##
```

```
## This message is shown once per session and may be disabled by setting
```

```
## options("getSymbols.warning4.0"=FALSE). See ?getSymbols for details.
```

```
##  
## WARNING: There have been significant changes to Yahoo Finance data.  
## Please see the Warning section of '?getSymbols.yahoo' for details.  
##  
## This message is shown once per session and may be disabled by setting  
## options("getSymbols.yahoo.warning"=FALSE).  
  
## [1] "GOOG"  
  
chart_Series(GOOG)
```



```
getSymbols("AAPL", src = "yahoo")  
  
## [1] "AAPL"  
  
chart_Series(AAPL)
```



```
google <- GOOG$GOOG.Adjusted
apple <- AAPL$AAPL.Adjusted
cor(google, apple)

## AAPL.Adjusted
## GOOG.Adjusted 0.9634673
```

I did the code in RMD because I wanted the graphs to print out. I have data from Yahoo Finance from Jan 3 2007 for both Google and Apple stocks. I chose these two stocks because they have a very strong correlation. As anchors of the tech sector, the way these two giants go may suggest the direction of the tech market as a whole.