

# Projekt

## Analiza podataka o igračima NHL lige

### Učitavanje podataka

Učitavamo podatke i analiziramo kako oni izgledaju.

```
players.data = read_xls("NHL_2016-17.xls")
```

```
## New names:
```

```
## * `` -> ...1
```

```
## * `` -> ...2
```

```
## * `` -> ...3
```

```
## * `` -> ...4
```

```
## * `` -> ...5
```

```
## * ...
```

```
head(players.data)
```

```
## # A tibble: 6 x 167
```

```
##   ...1    ...2    ...3    ...4    ...5    ...6    ...7    ...8    ...9   ...10  ...11  ...12  ...13
```

```
##   <chr> <chr> <chr> <chr> <chr> <chr> <chr> <chr> <chr> <chr> <chr> <chr> <chr>
```

```
## 1 NHL   NHL   NHL   NHL   NHL   NHL   NHL   NHL   NHL   NHL   NHL   NHL   <NA>
```

```
## 2 Born   City Pr/St Cntry Nat   Ht    Wt    DftYr DftRd Ovr1  Hand  NHLid Last~
```

```
## 3 1988~~ Hami~ ON    CAN   CAN   69    170   <NA>  <NA>  <NA>  R    8476~ Abbo~
```

```
## 4 1987~~ Musk~ MI    USA   USA   74    218   2005  2    42    L    8471~ Abde~
```

```
## 5 1993~~ Stoc~ <NA> SWE   SWE   71    196   2012  2    37    R    8476~ Aberg
```

```
## 6 1991~~ John~ RI    USA   USA   70    208   <NA>  <NA>  <NA>  R    8478~ Acci~
```

```
## # ... with 154 more variables: ...14 <chr>, ...15 <chr>, ...16 <chr>, `Primary
```

```
## #   Stats` <chr>, ...18 <chr>, ...19 <chr>, ...20 <chr>, ...21 <chr>,
```

```
## #   ...22 <chr>, ...23 <chr>, ...24 <chr>, ...25 <chr>, ...26 <chr>,
```

```
## #   ...27 <chr>, ...28 <chr>, ...29 <chr>, ...30 <chr>, ...31 <chr>,
```

```
## #   ...32 <chr>, `Key Team Stats` <chr>, ...34 <chr>, ...35 <chr>, ...36 <chr>,
```

```
## #   ...37 <chr>, ...38 <chr>, ...39 <chr>, ...40 <chr>, `Individual
```

```
## #   Stats` <chr>, ...42 <chr>, ...43 <chr>, ...44 <chr>, ...45 <chr>,
```

```
## #   ...46 <chr>, ...47 <chr>, ...48 <chr>, ...49 <chr>, ...50 <chr>,
```

```
## #   ...51 <chr>, ...52 <chr>, ...53 <chr>, ...54 <chr>, ...55 <chr>,
```

```
## #   ...56 <chr>, ...57 <chr>, ...58 <chr>, ...59 <chr>, ...60 <chr>,
```

```
## #   ...61 <chr>, ...62 <chr>, ...63 <chr>, ...64 <chr>, ...65 <chr>,
```

```
## #   ...66 <chr>, ...67 <chr>, ...68 <chr>, ...69 <chr>, ...70 <chr>,
```

```
## #   ...71 <chr>, ...72 <chr>, ...73 <chr>, ...74 <chr>, ...75 <chr>,
```

```
## #   ...76 <chr>, ...77 <chr>, ...78 <chr>, ...79 <chr>, ...80 <chr>,
```

```
## #   ...81 <chr>, ...82 <chr>, ...83 <chr>, ...84 <chr>, ...85 <chr>,
```

```
## #   ...86 <chr>, ...87 <chr>, ...88 <chr>, ...89 <chr>, ...90 <chr>,
```

```
## #   ...91 <chr>, ...92 <chr>, ...93 <chr>, ...94 <chr>, ...95 <chr>,
```

```
## #   ...96 <chr>, ...97 <chr>, ...98 <chr>, ...99 <chr>, ...100 <chr>,
```

```
## #   ...101 <chr>, ...102 <chr>, ...103 <chr>, ...104 <chr>, ...105 <chr>,
```

```
## #   ...106 <chr>, ...107 <chr>, ...108 <chr>, ...109 <chr>, ...110 <chr>,
```

```
## #   ...111 <chr>, ...112 <chr>, ...113 <chr>, ...
```

```
goalies.data = read_xls("NHL_Goalies_2016-17.xls")
```

```
## New names:
## * SA -> SA...22
## * GA -> GA...24
## * `AdjSV%` -> `AdjSV%...64`
## * `AdjSV%` -> `AdjSV%...74`
## * SA -> SA...77
## * ...
```

```
head(goalies.data)
```

```
## # A tibble: 6 x 111
##   `Last Name` `First Name` `Team(s)` DOB   `Birth City` `S/P` Cntry Nat      Ht
##   <chr>      <chr>      <chr>   <chr> <chr>      <chr> <chr> <chr> <dbl>
## 1 Allen      Jake        STL     1990~ Fredericton NB     CAN   CAN     74
## 2 Alves      Jorge       CAR     1979~ Boston      MA     USA   USA     69
## 3 Andersen   Frederik    TOR     1989~ Herning     <NA>   DNK   DNK     76
## 4 Anderson   Craig       OTT     1981~ Park Ridge  IL     USA   USA     74
## 5 Bachman    Richard     VAN     1987~ Salt Lake C~ UT     USA   USA     70
## 6 Bernier    Jonathan    ANA     1988~ Laval       QC     CAN   CAN     72
## # ... with 102 more variables: Wt <dbl>, Sh <chr>, `Dft Yr` <dbl>, Rd <dbl>,
## #   Ovrl <dbl>, GP <dbl>, GS <dbl>, GR <dbl>, W <dbl>, L <dbl>, T <dbl>,
## #   OTL <dbl>, SA...22 <dbl>, SV <dbl>, GA...24 <dbl>, `SV%` <dbl>, GAA <dbl>,
## #   GSAA <dbl>, MIN <dbl>, SO <dbl>, G <dbl>, A <dbl>, PTS <dbl>, PIM <dbl>,
## #   PenT <dbl>, PenD <dbl>, PenDf <dbl>, Supp <dbl>, QoC <dbl>, StMin <dbl>,
## #   StSV <dbl>, StGA <dbl>, `StSV%` <dbl>, StGAA <dbl>, QS <dbl>, `QS%` <dbl>,
## #   RBS <dbl>, Pull <dbl>, ReMin <dbl>, ReSV <dbl>, ReGA <dbl>, `ReSV%` <dbl>,
## #   ReGAA <dbl>, Dist <chr>, Reb <dbl>, Rush <dbl>, DS <dbl>, HighS <dbl>,
## #   HighG <dbl>, `HighSV%` <dbl>, MedS <dbl>, MedG <dbl>, LowS <dbl>,
## #   LowG <dbl>, `AdjSV%...64` <dbl>, EVSA <dbl>, EVGA <dbl>, `EV SV%` <dbl>,
## #   `PP SA` <dbl>, `PP GA` <dbl>, `PP SV%` <dbl>, `SH SA` <dbl>, `SH GA` <dbl>,
## #   `SH SV%` <dbl>, `AdjSV%...74` <dbl>, CA <dbl>, FA <dbl>, SA...77 <dbl>,
## #   xGA <dbl>, GA...79 <dbl>, `TrueSV%` <dbl>, `ExpSV%` <dbl>, xGSAA <dbl>,
## #   `ZS%` <dbl>, OZS <dbl>, DZS <dbl>, NZS <dbl>, CF <dbl>, FF <dbl>, SF <dbl>,
## #   xGF <dbl>, GF <dbl>, RebF <dbl>, RushF <dbl>, SOS <dbl>, SOG <dbl>, `SO
## #   SV%` <dbl>, SOW <dbl>, SOL <dbl>, NMC <chr>, Status <chr>, Salary <dtm>,
## #   `Cap Hit` <dtm>, Pace <dbl>, `1st` <dbl>, `2nd` <dbl>, `3rd` <dbl>,
## #   Star <dbl>, GPS <dbl>, Ginj <dbl>, ...
```