SPS-DATA607-ASSIGNMENT-2-RESULTS

Tage N Singh

2021-02-14

```
###This page provides some sample code and outputs for the Multi-Table Project
## Warning: package 'ggplot2' was built under R version 4.0.3
## Warning: package 'tidyverse' was built under R version 4.0.3
## Warning: package 'tibble' was built under R version 4.0.3
## Warning: package 'readr' was built under R version 4.0.3
## Warning: package 'forcats' was built under R version 4.0.3
## Warning: package 'RMySQL' was built under R version 4.0.3
## Warning: package 'DBI' was built under R version 4.0.3
mydb = dbConnect(MySQL(), user='localtest', password='Localtest!', dbname='shows', host='localhost')
#**Note** that the credentials are local to this implementation of MySQL
dbListTables(mydb)
## [1] "netflixratings" "survey"
rs = dbSendQuery(mydb, "SELECT * FROM survey")
data = fetch(rs)
df1 <- data.frame(data)</pre>
tibble (df1)
## # A tibble: 10 x 12
     Question title did.not.see.thi~ Very.dissatisfi~ Dissatisfied
##
##
         <int> <chr>
                               <int>
                                                 <int>
                                                              <int>
            1 The ~
## 1
                                   12
                                                     0
                                                                  0
            2 Brea~
                                   16
                                                     0
                                                                  0
            3 Brid~
## 3
                                   23
```

```
##
             4 Sher~
                                   17
                                                                   0
##
  5
             5 Ozark
                                   19
                                                      2
                                                                   0
##
  6
             6 Hann~
                                   25
                                                      0
                                                                   3
  7
             7 The ~
                                   29
                                                                   0
##
                                                      1
##
   8
             8 Coll~
                                    25
                                                      0
                                                                   0
##
  9
             9 Comm~
                                    22
                                                                   0
                                                      1
            10 Schi~
                                   18
## # ... with 7 more variables: Neither.satisfied.nor.dissatisfied <int>,
       Satisfied <int>, Very.satisfied <int>, Total <int>, Total.Responses <int>,
       Missing.Responses <int>, Last.Update <chr>
rs = dbSendQuery(mydb, "SELECT * FROM netflixratings")
data = fetch(rs)
df2 <- data.frame(data)
tibble(df2)
## # A tibble: 487 x 7
      title rating ratingLevel ratingDescripti~ release.year user.rating.sco~
##
      <chr> <chr> <chr>
                                           <int>
                                                        <int>
                                                                          <int>
##
   1 10 T~ PG-13 adult cont~
                                              80
                                                         1999
                                                                             68
## 2 100 ~ TV-MA For mature~
                                             110
                                                         2016
                                                                              0
   3 30 R~ TV-14 Parents st~
                                              90
                                                         2012
                                                                             66
## 4 5 to~ R
                   some sexua~
                                             100
                                                         2014
                                                                              0
## 5 A Mo~ PG
                   some actio~
                                                                              0
                                              60
                                                         2011
## 6 A We~ TV-MA For mature~
                                             110
                                                         2016
                                                                              0
## 7 Abso~ TV-14 Parents st~
                                              90
                                                         2012
                                                                             59
## 8 Abst~ TV-14 0
                                              90
                                                         2017
                                                                              0
## 9 Agen~ PG
                   Parental g~
                                                         2014
                                                                              0
                                              60
## 10 Air ~ G
                   General Au~
                                              35
                                                         2003
                                                                              0
## # ... with 477 more rows, and 1 more variable: user.rating.size <int>
```

The Following Query uses a **LEFT JOIN** to demonstrate the fields from the survey table that do not have a value in the netflixratings table will be part of the resultant dataset.

```
rs = dbSendQuery(mydb, "SELECT survey.title,
survey.'Very satisfied',
survey.'Satisfied',
survey.'Dissatisfied',
survey.'Uery dissatisfied',
survey.'Very dissatisfied',
survey.'did not see this one',
netflixratings.'rating',
netflixratings.'release year',
netflixratings.'ratingDescription'
FROM survey LEFT JOIN netflixratings ON (survey.title = netflixratings.title);")

data = fetch(rs,n=50)
df3 <- data.frame(data)
```

tibble(df3)

```
## # A tibble: 10 x 10
      title Very.satisfied Satisfied Neither.satisfi~ Dissatisfied Very.dissatisfi~
##
##
                               <int>
                                                             <int>
      <chr>
                     <int>
                                                <int>
                                                                               <int>
##
  1 The ~
                       14
                                                                 0
                                                                                   0
## 2 Brea~
                        10
                                   7
                                                                 0
                                                                                   0
                                                    1
## 3 Brid~
                         2
                                   3
                                                    1
                                                                 4
                                                                                   0
## 4 Sher~
                         5
                                   7
                                                    4
                                                                 Λ
                                                                                   0
## 5 Ozark
                         4
                                   7
                                                                                   2
## 6 Hann~
                         4
                                                                 3
                                                                                   0
                                   1
                                                    1
## 7 The ~
                         2
                                   1
                                                    1
                                                                 0
                                                                                   1
                        0
                                   7
## 8 Coll~
                                                    2
                                                                 0
                                                                                   0
## 9 Comm~
                         3
                                                                 0
                                                    1
                                                                                   1
## 10 Schi~
                         5
                                   4
                                                    3
                                                                                   1
                                                                 1
## # ... with 4 more variables: did.not.see.this.one <int>, rating <chr>,
## # release.year <int>, ratingDescription <int>
```

The Following Query uses a **INNER JOIN** to demonstrate the fields from the survey table that do not have a value in the netflix table will NOT be part of the resultant dataset

```
rs = dbSendQuery(mydb, "SELECT survey.title,
survey.'Very satisfied',
survey.'Satisfied',
survey.'Dissatisfied',
survey.'Uery dissatisfied',
survey.'did not see this one',
netflixratings.'rating',
netflixratings.'release year',
netflixratings.'ratingDescription'
FROM survey INNER JOIN netflixratings ON (survey.title = netflixratings.title);")
data = fetch(rs,n=50)
df4 <- data.frame(data)
tibble(df4)</pre>
```

```
## # A tibble: 8 x 10
##
     title Very.satisfied Satisfied Neither.satisfi~ Dissatisfied Very.dissatisfi~
##
     <chr>
                    <int>
                               <int>
                                                <int>
                                                              <int>
                                                                               <int>
## 1 Brea~
                       10
                                  7
                                                                  0
                                                                                   0
## 2 Brid~
                        2
                                   3
                                                                  4
                                                                                    0
                                                    1
## 3 Hann~
                        4
                                   1
                                                    1
                                                                  3
                                                                                   0
## 4 Ozark
                                  7
                                                    2
                                                                  0
                                                                                   2
                        4
## 5 Schi~
                        5
                                   4
                                                    3
                                                                  1
## 6 Sher~
                        5
                                  7
                                                    4
                                                                  0
                                                                                   0
## 7 The ~
                        2
                                   1
                                                                  0
                       14
                                   6
## 8 The ~
                                                    2
## # ... with 4 more variables: did.not.see.this.one <int>, rating <chr>,
## # release.year <int>, ratingDescription <int>
```

```
rs = dbSendQuery(mydb, "SELECT * from survey")
data = fetch(rs, n=50)
df5 <- data.frame(data)</pre>
tibble(df5)
## # A tibble: 10 x 12
      Question title did.not.see.thi~ Very.dissatisfi~ Dissatisfied
##
##
         <int> <chr>
                               <int>
                                                  <int>
                                                               <int>
            1 The ~
## 1
                                   12
                                                      0
## 2
             2 Brea~
                                   16
                                                      0
                                                                   0
## 3
             3 Brid~
                                   23
                                                      0
                                                                   4
## 4
            4 Sher~
                                   17
                                                                   0
## 5
            5 Ozark
                                   19
                                                      2
                                                                   0
## 6
            6 Hann~
                                   25
                                                      0
                                                                   3
## 7
            7 The ~
                                   29
                                                      1
                                                                   0
## 8
            8 Coll~
                                   25
                                                      0
                                                                   0
## 9
            9 Comm~
                                   22
                                                                   0
                                                      1
## 10
            10 Schi~
                                   18
                                                      1
## # ... with 7 more variables: Neither.satisfied.nor.dissatisfied <int>,
       Satisfied <int>, Very.satisfied <int>, Total <int>, Total.Responses <int>,
## #
       Missing.Responses <int>, Last.Update <chr>
```

Another Query converted to a dataframe showing the INNER JOIN feature of the table join

```
rs = dbSendQuery(mydb, "SELECT survey.title,
survey.'Very satisfied',
survey.'Total Responses',
netflixratings.'user rating score'
FROM survey INNER JOIN netflixratings ON (survey.title = netflixratings.title);")
data = fetch(rs,n=50)
df6 <- data.frame(data)
tibble(df6)</pre>
```

```
## # A tibble: 8 x 4
##
    title
                                Very.satisfied Total.Responses user.rating.score
     <chr>
                                          <int>
                                                          <int>
                                                                              <int>
## 1 Breaking Bad
                                             10
                                                              34
                                                                                97
## 2 Bridgerton
                                              2
                                                              34
                                                                                96
## 3 Hannibal
                                              4
                                                              34
                                                                                90
## 4 Ozark
                                              4
                                                              34
                                                                                93
## 5 Schitt's Creek
                                              5
                                                              34
                                                                                74
## 6 Sherlock
                                              5
                                                              34
                                                                                95
## 7 The Haunting of Bly Manor
                                             2
                                                             34
                                                                                88
## 8 The Queen's Gambit
                                             14
                                                              34
                                                                                97
```

This marks the End of this Test Project