PhenomProjectsFromOracle

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4/26/2018

This script will isolate key Oracle acquisition variables for BBL projects for the PHENOM Machine Learning project.

It will summarize the acqusition variability per BBL project to determine suitability for data aggregation.

```
SCZ <- read.csv(paste0('/Users/anup/Desktop/sharedFiles/Neuroimaging/BBLProjects/Phenom_2018/',
      'DataPull/042618/n208_scz_sample_20180424.csv'))
TD <- read.csv(paste0('/Users/anup/Desktop/sharedFiles/Neuroimaging/BBLProjects/Phenom_2018/',
      'DataPull/042618/n667_td_sample_20180424.csv'))

SCZ.key <- SCZ[,c("bblid","scanid","project","protocol_diagnosis","from_capa","from_digs","from_scid","
TD.key <- TD[,c("bblid","scanid","project","protocol_diagnosis","from_capa","from_digs","from_scid","fr


#Types of projects
levels(SCZ.key$project)
```

```
##  [1] "AFFECT_346200"  "AFFECT2_804847" "CONTE_815814"   "CONTE2_704060"
##  [5] "CONTE2_815814"  "DAY2_808799"    "DEFACE_708311"  "EONS_810366"
##  [9] "EONS3_810336"   "FNDM2_810211"   "GRMPY_V3"       "MGI_808922"
## [13] "NEFF_PILOT"     "NEFF_V2"        "NODRA_MBREST"   "OLIFE_807360"
## [17] "ONM_816275"     "PROSE_807017"   "SYRP_818621"    "WORDEN_700205"
```

```
levels(TD.key$project)
```

```
##  [1] "22Q_812481"     "AFFECT_346200"  "AFFECT2_804847" "CONTE_815814"
##  [5] "CONTE2_704060"  "CONTE2_815814"  "DAY2_808799"    "EONS_810366"
##  [9] "EONS3_810336"   "EONSX_810366"   "FNDM2_810211"   "GRMPY_822831"
## [13] "GRMPY_V2"       "GRMPY_V3"       "MGI_808922"     "MRSP-7_811940"
## [17] "NEFF_PILOT"     "NEFF_V2"        "NODRA_MBREST"   "NOFACE_809108"
## [21] "OLIFE_807360"   "ONM_816275"     "PROSE_807017"   "SMS_817163"
## [25] "SYRP_818621"    "WORDEN_700205"
```

```
#Number of subjects per project
table(SCZ.key$project)
```

```
##
##  AFFECT_346200 AFFECT2_804847   CONTE_815814  CONTE2_704060  CONTE2_815814
##              7             24             17             18              3
##    DAY2_808799  DEFACE_708311    EONS_810366   EONS3_810336   FNDM2_810211
##             11              1              3              5             19
##       GRMPY_V3     MGI_808922     NEFF_PILOT        NEFF_V2   NODRA_MBREST
##              4             18             13             13              5
##   OLIFE_807360     ONM_816275   PROSE_807017    SYRP_818621  WORDEN_700205
```

```
##             19              6              9              2             11
```

```
table(TD.key$project)
```

```
##
##     22Q_812481  AFFECT_346200 AFFECT2_804847   CONTE_815814  CONTE2_704060
##              2             12             38             34             16
##  CONTE2_815814    DAY2_808799    EONS_810366   EONS3_810336   EONSX_810366
##              2             21            136            102              4
##   FNDM2_810211   GRMPY_822831       GRMPY_V2       GRMPY_V3     MGI_808922
##             15             21             10             30            107
##  MRSP-7_811940     NEFF_PILOT        NEFF_V2   NODRA_MBREST  NOFACE_809108
##              1             10             11             12              2
##   OLIFE_807360     ONM_816275   PROSE_807017     SMS_817163    SYRP_818621
##             19             26              7              2             18
##  WORDEN_700205
##              9
```

```
#Range of values for Key Image Measures
#Hardware Manufacturer
table(SCZ.key$hardware_magnetmanufacturer)
```

```
##
## SIEMENS
##     208
```

```
#FieldStrength
table(SCZ.key$hardware_fieldstrength)
```

```
##
##         2.89362 2.8936200141907              3
##              19              43             146
```

```
#Hardware Institute
table(SCZ.key$hardware_institute)
```

```
##
##                             DEVON MRD1
##                                     1
##                    HOSP OF UNIV OF PA
##                                     1
## Hospital of University of Pennsylvania
##                                     8
##                                   HUP
##                                    92
##                          hup devon mrd1
##                                     2
##                                  hup6
##                                     1
##                                  HUP6
##                                    58
##                                   MR6
##                                    40
##                                  MRD1
##                                     1
##                                  SC3T
##                                     4
```

```
#MR Series description
table(SCZ.key$mr_seriesdescription)
```

```
##
##                     mprage                     MPRAGE
##                         18                         18
##        mprage_0.8mm_ipat2             mprage_TI1100
##                          8                         43
##             MPRAGE_TI1100       MPRAGE_TI1100_ipat2
##                         10                         60
## MPRAGE_TI1110_ipat2_moco3
##                         51
```

```
#Qlux Type
table(SCZ.key$qlux_qluxtype)
```

```
##
##            1.0         STRUCT     STRUCTURAL STRUCTURAL_RPI      T1_Struct
##              1              6             88             96             17
```

```
#TR
table(SCZ.key$mr_tr)
```

```
##
## 1630 1680 1810 1850 2000
##   61   18   70   51    8
```

```
#TE
table(SCZ.key$mr_te)
```

```
##
## 3.22 3.45 3.51 3.87    4 4.67
##    7    4   66   62   51   18
```

```
#Percent FOV
table(SCZ.key$mr_percentfov)
```

```
##
##  75 100
## 200   8
```

```
#Matrix
table(SCZ.key$mr_acquisitionmatrix)
```

```
##
## 0\\256\\192\\0 0\\256\\256\\0 256\\0\\0\\256
##            200              2              6
```

```
#SliceThickness
table(SCZ.key$mr_slicethickness)
```

```
##
##              0.8 0.80000001192093              1.0             nznt
##                6                2              199                1
```

```
#FlipAngle
table(SCZ.key$mr_flipangle)
```

```
##
```

```
##   15.0    9.0 GR\\IR
##     87    120      1
```

```
#Geometry
table(SCZ.key$geometry_dx)
```

```
##
## 0.78125  0.9375       1
##       8     181      19
```

```
table(SCZ.key$geometry_dy)
```

```
##
## 0.78125  0.9375       1
##       8     181      19
```

```
table(SCZ.key$geometry_dz)
```

```
##
## 0.800000011920929                 1
##                 8               200
```