

Functions

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This is to document the development of functions derived from various other activities to support the FPA project. It is important to note that functions developed or documented here will have to be included in an R file so they may be easily brought into the R environment in the future.

Data Input

this function will read the csv file in and will make required conversions to factors or date

```
get.csv <- function(file = "../data/First Pass Acceptance.csv"){
  FPA <- read.csv( file = file,
    stringsAsFactors = FALSE,
    col.names = c("sqa",
      "project",
      "application",
      "deliverable",
      "version",
      "docID",
      "status",
      "date",
      "reason",
      "comments"))
  FPA$sqa <- as.factor(FPA$sqa)
  FPA$application <- as.factor(FPA$application)
  FPA$deliverable <- as.factor(FPA$deliverable)
  FPA$status <- as.factor(FPA$status)
  FPA$reason <- as.factor(FPA$reason)
  levels(FPA$reason)[1] <- NA
  FPA$date <- as.Date(FPA$date, format = "%d-%B-%y")
  return(FPA)
}
```

Test

count

First the function is run creating the FPA data frame. Then the number of rows in the data frame is checked against the source data (66 at this time) as well as the number of columns (10)

```
FPA <- get.csv()
nrow(FPA)
```

```
## [1] 66
```

```
ncol(FPA)
```

```
## [1] 10
```

```
dim(FPA)
```

```
## [1] 66 10
```

Factors and Date

Now a count of each factor will be tabulated to verify against the know data

```
table(FPA$sqa)
```

```
##
```

```
## Beilah Nick Wayne
```

```
## 37 24 5
```

```
table(FPA$application)
```

```
##
```

```
## Abbott Transfusion Medicine AFMS
```

```
## 1 9
```

```
## Apollo/PHM Assay File Database
```

```
## 9 2
```

```
## DaVinci DFCS
```

```
## 4 6
```

```
## DPW Groninger
```

```
## 3 1
```

```
## Metrics Library PCN/SCN
```

```
## 1 2
```

```
## Pulse QIMS
```

```
## 10 4
```

```
## SAS WWLIMS
```

```
## 1 13
```

```
table(FPA$deliverable)
```

```
##
```

```
## CII Design Verification
```

```
## 5 2
```

```
## FRS IIVP results
```

```
## 4 7
```

```
## Project Plan Software Change Request
```

```
## 4 5
```

```
## Software Compliance Assessment System Certification Summary
```

```
## 3 1
```

```
## Test Protocol Test Protocol Results
```

```
## 21 6
```

```
## Traceability URS
```

```
## 3 2
```

```
## User Acceptance Protocol Validation Plan
```

```
##                                2                                1
table(FPA$status)

##
##      A  A-FP      D
##    14    37    15
table(FPA$reason)

##
##              Inaccurate information
##                                7
##              Incorrect scope
##                                1
##      Not compliant with procedure
##                                5
## Not following document version control
##                                1
##              Requirement deficiency
##                                1
table(FPA$date)

##
## 2018-01-03 2018-01-09 2018-01-11 2018-01-15 2018-01-16 2018-01-17
##           2           1           1           14           17           11
## 2018-01-18 2018-01-19 2018-01-22
##           16           3           1
```