

How well subjects did in bar bell lifts

Executive Summary

bla bla bla...

Data

Import Data from download cvs or from website link

```
if (!file.exists("pml-training.csv")) {  
  download.file("http://d396qusza40orc.cloudfront.net/predmachlearn/pml-training.csv",  
               destfile = "pml-training.csv")  
}  
if (!file.exists("pml-testing.csv")) {  
  download.file("http://d396qusza40orc.cloudfront.net/predmachlearn/pml-testing.csv",  
               destfile = "pml-testing.csv")  
}
```

Read in Data

```
pmlTraining <- read.csv("pml-training.csv", header = TRUE, sep = ",", na.strings=c("#DIV/0!"))  
pmlTesting <- read.csv("pml-testing.csv", header = TRUE, sep = ",", na.strings=c("#DIV/0!"))  
# View(pmlTraining)  
pmlTraining[ pmlTraining == '' | pmlTraining == 'NA'] <- NA
```

Clean Data

Reviewing the data we find three things we need to adjust

- NA values
- Missing values, which we dealt with by turning them into NA above
- Error Expressions, which we handle on import via na.strings