Model_Results

Team

1/17/2021

```
df_results = read.csv('results.csv')
df_results$MSE = round(as.numeric(df_results$MSE),6)
```

```
## Warning: NAs introduced by coercion
```

```
df_results$RMSE = round(as.numeric(df_results$RMSE),6)
```

```
## Warning: NAs introduced by coercion
```

```
df_results$MAE = round(as.numeric(df_results$MAE),6)
```

```
## Warning: NAs introduced by coercion
```

```
library(ggplot2)
library(knitr)
library(kableExtra)

df_results2 = df_results[,-c(1,2)]
options(knitr.kable.NA = "-")
kable(df_results2, caption = "Model Performances", booktabs = TRUE) %>%
  row_spec(16, bold = TRUE) %>%
  pack_rows(index = c("Ktrain-bert-TextReg" = 2, "  Ktrain-sentencebertAPI-TextReg" = 2,
                      "Ktrain-distilbertAPI-TextReg" = 2, "Ktrain-standard-CustReg" = 2,
                      "Ktrain-bert-CustReg" = 2, "RF-sentencebert-Reg"=2,
                      "PCA-sentencebert-Reg"=2, "XGBoost-sentencebert-Reg"=2))
```

Table 1: Model Performances

Model_ID	Input	MSE	RMSE	MAE
Ktrain-bert-TextReg				
1-KbT1	NC	0.007500	0.086603	0.075200
2-KbT2	NCFM	0.002100	0.045826	0.035000
Ktrain-sentencebertAPI-TextReg				
3-KsbAT1	NC	0.002300	0.047958	0.400000
4-KsbAT2	NCFM	0.002100	0.045826	0.037500
Ktrain-distilbertAPI-TextReg				
5-KdbAT1	NC	0.001300	0.036056	0.029400
6-KdbAT2	NCFM	0.001700	0.041231	0.034600
Ktrain-standard-CustReg				
7-KlC1	NC	-	-	-
8-KlC2	NCFM	0.000991	0.031487	0.021900
Ktrain-bert-CustReg				
9-KbC1	NC	-	-	-
10-KbC2	NCFM	0.000323	0.017966	0.014100
RF-sentencebert-Reg				
11-RF1	NC	0.000166	0.012876	0.009291
12-RF2	NCFM	0.000164	0.012813	0.009213
PCA-sentencebert-Reg				
13-PCR1	NC	0.000235	0.015344	0.012335
14-PCR2	NCFM	0.000223	0.014919	0.011146
XGBoost-sentencebert-Reg				
15-XGB1	NC	0.000171	0.013080	0.009271
16-XGB2	**NCFM**	**0.000155**	**0.012470**	**0.008873**