Appendix A-Full Source Code of Stock Trend Prediction and Recommendation System Using R-21-June-2018

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Appendix A: Source Code Listing of Stock Prediction System using Multiple Regression

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This document provides detail of the source code listing of stock trend prediction system using Multiple Regression implemented by Fazal Rahman during her MS-CS research under the supervision of Dr. Muhammad Zubair Asghar (https://scholar.google.com.pk/citations?user=_CNMYU0AAAAJ&hl=en)

Tools used: (i) R and R studio

Appendix A: Full Source Code of Recommendation System Using R

> library(gWidgets)
> library(gWidgetstcltk)
> library(digest)
> win <- gwindow("Recommendation System for Stock Trend Prediction")
> grp <- ggroup(container = win, horizontal=TRUE)
> lb1 <- glabel(container=grp,text="Enter Volatility:"
> font(lb1) <- list(family="times",size=15,weight="bold")
> txt1 <- gedit("", container = grp,coerce.with=as.numeric )
> lb2 <- glabel(container=grp,text="Enter Volume:"
> font(lb2) <- list(family="times",size=15,weight="bold")
> txt2 <- gedit("", container = grp,coerce.with=as.numeric)
> lb3 <- glabel(container=grp,text="Enter ROI:"
> font(lb3) <- list(family="times",size=15,weight="bold")
> txt3 <- gedit("", container = grp,coerce.with=as.numeric)
> data1 <- read.csv(file.choose(), header=TRUE)
> fit <- lm(Return ~ Volatility + Volume + ROI, data1)
> g <- ggroup(cont=win, horizontal=FALSE)
> gbutton("Predict",border=TRUE,cont=g,handler=function(h,...) {
+ pred <- list(Volatility=svalue(txt1), Volume=svalue(txt2), ROI=svalue(txt3))
+ pr <- predict(fit,pred)
+ a<-0
+ for(i in 1:24) if(pr>data1$Return[i]) a<-a+1
+ if(a>17) svalue(u)<- "Invest Money on Stock" else svalue(u)<- "Not Invest Money on Stock"
+ })

Bibliographic References


