```
library(shiny)
library(shinydashboard)
library(arules)
library(stringr)
library(datasets)
################################################################################
########################################
source("Apriori.r", local = TRUE)
################################################################################
########################################
Logged = FALSE;
REGISTERED = FALSE;
#PASSWORD <- data.frame(Username = "1", Password = "1")
PASSWORD <- read.csv("pw_db.csv", header = TRUE)
PASSWORD <- as.data.frame(PASSWORD)
print(PASSWORD)
#source("Login.r",  local = TRUE)
server <- function(input, output){

  source("Login.r", local = TRUE)
  ############
  output$text1 <- renderText({
    "Welcome"
  })

  observe({

    if(!is.null(input$logout)){
      if(input$logout > 0){
        stopApp()
      }
    }

    if (USER1$REGISTERED == TRUE){
      print("True")

      output$page1 <- renderUI({

        sidebarMenu(
          #menuItem("Georgia Tech Course Catalog",icon =
icon("dashboard"),href = "http://www.catalog.gatech.edu/courses-grad/ece/"),

                    menuItem("Links!",icon = icon("external-link-square"),
                             menuSubItem("Your BuzzPort!! ", icon =
icon("dashboard"), href =
"https://buzzport.gatech.edu/cp/home/displaylogin"),
                             menuSubItem("Find your Course!!  - Georgia Tech
Course Catalog", icon = icon("dashboard"), href =
"https://oscar.gatech.edu/pls/bprod/bwckctlg.p_disp_dyn_ctlg"),
                             menuSubItem("Average Course Grade!! - Georgia
Tech Course Critique", icon = icon("dashboard"), href =
"https://critique.gatech.edu/")
                             ),

                     title=("Enter personal information"),
                     textInput("name","Enter your name",""),
```

```
                    selectInput("mydegreelevel","Enter your degree
level",c("UG" ,"Master's", "PhD", " "),selected= " ", selectize = TRUE),
                    #selectInput("uField","Enter your field of
study",choices = c("ECE" =1 ,"CS"=2, " "=3),selected= " ", selectize = TRUE)
                    selectInput("uField","Enter your field of study",c("ECE"
,"CS", " "),selected= " ", selectize = TRUE),
                    selectInput("uTIG","Enter your TIG", tig.list, selected=
" ", selectize = TRUE),
                    selectInput("uTerm","Enter your Term",
c("Fall","Spring"," " ),selected=" ",selectize = TRUE, multiple = FALSE),
                    selectInput("uSem","Is this your 1st sem?",
c("YES","NO"," " ),selected=" ",selectize = TRUE, multiple = FALSE),
                    uiOutput("y2"),

                   actionButton("done", "Done")

      )
    })

  }



  if (USER$Logged == TRUE){


    output$page1 <- renderUI({

     sidebarMenu(
       #menuItem("Georgia Tech course catalog",icon =
icon("dashboard"),href = "http://www.catalog.gatech.edu/courses-grad/ece/"),
       menuItem("Important Links!",icon = icon("external-link-square"),
                menuSubItem("Your BuzzPort!! ", icon = icon("forumbee"),
href = "https://buzzport.gatech.edu/cp/home/displaylogin"),
                menuSubItem("Find your Course!!  - Georgia Tech Course
Catalog", icon = icon("graduation-cap"), href =
"https://oscar.gatech.edu/pls/bprod/bwckctlg.p_disp_dyn_ctlg"),
                menuSubItem("Average Course Grade!! - Course Critique",
icon = icon("book"), href = "https://critique.gatech.edu/"),
                menuSubItem("Georgia Tech Calender", icon =
icon("calendar"), href = "http://www.registrar.gatech.edu/calendar/")
       ),



      selectInput("uTerm","Enter your Term", c("Fall","Spring"," "
),selected=" ",selectize = TRUE),
      selectInput("uTIG","Enter your TIG", tig.list, selected= " ",
selectize = TRUE),
      selectInput("uCourse","Enter your courses taken", courses$Full_Info,
selected=" ",selectize = TRUE, multiple = TRUE),

      #checkboxGroupInput("Tabs",
label=h4("tabpanel"),choices=list("tabs"="Tabs"),selected = NULL)
      actionButton("logout", "Logout")

      )
```

```
  })




  output$page2 <- renderUI({

   fluidRow( (title="Personal information"),
    textOutput("myname"),
    textOutput("mydegreelevel"),
    textOutput("myufield"),
    textOutput("myuTIG"),
    #selectInput("myusem"),

    tabsetPanel(
      tabPanel("All courses", dataTableOutput("mydatabase1")),
      tabPanel("Recommended",dataTableOutput("mydatabase"))


    )
   )
  })

  PASSWORD <- read.csv("pw_db.csv", header = TRUE)
  PASSWORD <- as.data.frame(PASSWORD)
  Username <- isolate(input$userName)
  Password <- isolate(input$passwd)
  pwd <- read.csv("pw_db.csv")
  Id.username <- which(PASSWORD$Username == Username)
  n1 <- pwd[Id.username[1],3]
  output$myname <- renderText(
    paste("Name is:", n1 ))
  n2 <- pwd[Id.username[1],4]
  output$mydegreelevel <- renderText(
    paste("Degree Level:",n2 ))
  n3 <- pwd[Id.username[1],5]
  output$myufield <- renderText(
    paste("Field is:",n3) )
  n4 <- pwd[Id.username[1],6]

  output$myuTIG <- renderText(
    paste("TIG :",n4) )

  # output$myuCourse <- renderText(
  #   paste("Courses :",input$uCourse) )
##############################################################
  # m <- dim(rules2)[1]
  # n <- dim(rules2)[2]
  # mat <- matrix(0:0 ,m,n)

  #mat[1, ] <- rules1[1, ]

  output$mydatabase <- renderDataTable({

    # rulesmat <-  as.matrix(rules2)
    # for (i in 1:dim(rules2)[1]){
```

```
        #   if(all(is.na(str_match(rulesmat[i,1],input$uCourse)))==FALSE){
        #     mat[i, ]<-rulesmat[i, ]
        #   }
        #
        #
        # }
        # # mat <- mat[(all(is.na(str_match(mat[ ,1],"LSC")))==FALSE)]
        # mat <- mat[mat[ ,1]!=0, ]
        # matt <- as.data.frame(mat)
        # reco<-matt[ ,3]
        # recommend <- levels(reco)
        #
        # recommend1 <- as.data.frame(recommend)
        # recommend1mat <- as.matrix(recommend1)

##############################################################################
###########
       if(input$uTerm == "Fall")
       {
        course.input <- input$uCourse
        rules.search <- rules2[grep(paste(course.input, collapse="|"),
rules2$lhs),]
        rules.search1 <- as.data.frame(unique(rules.search[, 2]))
       }
      else{
          course.input <- input$uCourse
          rules.search <- rules2.spring[grep(paste(course.input,
collapse="|"), rules2.spring$lhs),]
          rules.search1 <- as.data.frame(unique(rules.search[, 2]))
          }

##############################################################################
###########
        recommend1mat <- as.matrix(rules.search1)
        a <- dim(recommend1mat)[1]
        b <- dim(recommend1mat)[2]
        temp <- matrix(0:0 ,a,b)

        if(a!=0){

          for (i in 1:a)
          {


if(all(is.na(str_match(recommend1mat[i,1],input$uCourse)))==TRUE){
              temp[i,1 ]<-recommend1mat[i,1 ]
            }

          }

          temp <- temp[temp[ ,1]!=0, ]
          tempdata <- as.data.frame(temp)


##############################################################################
#########
```

```
          tempdata[]


        }else{


          rules.search1[]

        }

      })


################################################################################
#################3

      output$mydatabase1 <- renderDataTable({

        tig.ece <- switch(input$uTIG,
                          "BioEngineering" = courses.by.tig.ece[,1],
                          "Computer Systems and Software" =
courses.by.tig.ece[,2],
                          "Digital Signal Processing" = courses.by.tig.ece[,3],
                          "Electrical Energy" = courses.by.tig.ece[,4],
                          "Electromagnetics" = courses.by.tig.ece[,5],
                          "Electronic Design and Applications" =
courses.by.tig.ece[,6],
                          "Microelectronics" = courses.by.tig.ece[,7],
                          "Optics & Photonics" = courses.by.tig.ece[,8],
                          "Systems ad Controls" = courses.by.tig.ece[,9],
                          "Telecommunications" = courses.by.tig.ece[,10],
                          "VLSI" = courses.by.tig.ece[,11],
                          "Computation Perception and Robotics" =
courses.by.tig.ece[,12],
                          "Computer Graphics" = courses.by.tig.ece[,13],
                          "Computing Systems" = courses.by.tig.ece[,14],
                          "Human Computer Interaction" = courses.by.tig.ece[,15],
                          "Interactive Intelligence" = courses.by.tig.ece[,16],
                          "Electronic Design and Applications" =
courses.by.tig.ece[,17],
                          "Machine Learning" = courses.by.tig.ece[,18],
                          "Social Computing" = courses.by.tig.ece[,19],
                          "Visual Analytics" = courses.by.tig.ece[,20]




        )

        # tig.cs <- switch(input$uTIG,
        #                  "Computation Perception and Robotics" =
courses.by.tig.cs[,1],
        #                  "Computer Graphics" = courses.by.tig.cs[,2],
        #                  "Computing Systems" = courses.by.tig.cs[,3],
        #                  "Human Computer Interaction" =
courses.by.tig.cs[,4],
```

```
        #                   "Interactive Intelligence" =
courses.by.tig.cs[,5],
        #                   "Electronic Design and Applications" =
courses.by.tig.cs[,6],
        #                   "Machine Learning" = courses.by.tig.cs[,7],
        #                   "Social Computing" = courses.by.tig.cs[,8],
        #                   "Visual Analytics" = courses.by.tig.cs[,9]
        #
        # )

        tig1.ece <-as.data.frame(tig.ece)
        #tig1.cs <-as.data.frame(tig.cs)
        #output$mydatabase1 <- renderDataTable({
        if (n2 == "Master's")

        {

          tig1.ece[]
        }

      })

    }
  })
}
```