STARTING APP

# ---------------------------------------------------------------------------- #

# ACTIVITY 1.4c BARPLOT\_2 SERVER

# ---------------------------------------------------------------------------- #

library(shiny)

library(dplyr)

library(ggplot2)

library(RColorBrewer)

raw\_data <- read.csv("data/raw\_data.csv", stringsAsFactors=FALSE)

# Create a colour palette

col\_palette <- brewer.pal(name="Dark2", n=8)

#------------------------------------------------------------------------------#

# Begin server section

shinyServer(function(input, output) {

# Produce plot

output$barPlot <- renderPlot({

ggplot() +

geom\_bar(data=raw\_data, aes\_string(x=input$xaxis), fill=col\_palette[1]) +

labs(x=input$xaxis, y="Number of records") +

# Extra plotting code to control appearence

theme\_classic() +

theme(axis.text = element\_text(size=14),

axis.title = element\_text(size=18),

plot.title = element\_text(size=20),

legend.title = element\_text(size=18),

legend.text = element\_text(size=14))

})

# Produce text output

output$output\_text <- renderPrint({

paste0("You have chosen to show '", input$xaxis, "' on the x-axis.")

})

})

STARTING APP

# ---------------------------------------------------------------------------- #

# ACTIVITY 1.4c BARPLOT\_2 UI

# ---------------------------------------------------------------------------- #

library(shiny)

#------------------------------------------------------------------------------#

# Begin ui section

shinyUI(fluidPage(

# Application title

titlePanel("Day 1 - Barplot\_2"),

# Add a line break

br(),

# Add text section

h4("This app our first introduction to rShiny!"),

h4("There is still only 1 widget - a dropdown menu - but there is now a text output below."),

# Add a line break

br(),

# Sidebar with a slider input for number of bins

sidebarLayout(

sidebarPanel(

# Add a dropdown menu

selectInput("xaxis", label = h3("Select the x-axis variable:"),

choices = list("Sex" = "sex", "Species" = "species", "Age" = "age"),

selected = 1),

br(),

# Add a text output

verbatimTextOutput("output\_text")

),

# Show plot

mainPanel(

plotOutput("barPlot", height=700)

)

)

))

COMPLETED APP

# ---------------------------------------------------------------------------- #

# ACTIVITY 1.4c BARPLOT\_2 SERVER

# ---------------------------------------------------------------------------- #

library(shiny)

library(dplyr)

library(ggplot2)

library(RColorBrewer)

raw\_data <- read.csv("data/raw\_data.csv", stringsAsFactors=FALSE)

# Create a colour palette

col\_palette <- brewer.pal(name="Dark2", n=8)

#------------------------------------------------------------------------------#

# Begin server section

shinyServer(function(input, output) {

# Produce plot

output$barPlot <- renderPlot({

ggplot() +

geom\_bar(data=raw\_data, aes(x=raw\_data[[input$xaxis]]), fill=col\_palette[1]) +

labs(x=paste0("\n", input$xaxis), y="Number of records\n") +

# Extra plotting code to control appearence

theme\_classic() +

theme(axis.text = element\_text(size=14),

axis.title = element\_text(size=18),

plot.title = element\_text(size=20),

legend.title = element\_text(size=18),

legend.text = element\_text(size=14))

})

# Produce text output

output$output\_text <- renderPrint({

paste0("You have chosen to show '", input$xaxis, "' on the x-axis.")

})

# Produce a second text output

output$output\_values <- renderPrint({

summary(raw\_data[[input$xaxis]])

})

})

COMPLETED APP

# ---------------------------------------------------------------------------- #

# ACTIVITY 1.4c BARPLOT\_2 UI

# ---------------------------------------------------------------------------- #

library(shiny)

#------------------------------------------------------------------------------#

# Begin ui section

shinyUI(fluidPage(

# Application title

titlePanel("Exploratory plots: Barplot\_2 (Master)"),

# Add a line break

br(),

# Add text section

h4("This app our first introduction to rShiny!"),

h4("There is only 1 widget: selectInput - a dropdown menu. We have set this up to change the variable that is plotted on the x-axis."),

# Add a line break

br(),

# Sidebar with a slider input for number of bins

sidebarLayout(

sidebarPanel(

# Add a dropdown menu

selectInput("xaxis", label = h3("Select the x-axis variable:"),

choices = list("Sex" = "sex", "Species" = "species", "Age" = "age"),

selected = 1),

br(),

# Add a text output

verbatimTextOutput("output\_text"),

br(),

# Add another text output

verbatimTextOutput("output\_values")

),

# Show a plot of the generated distribution

mainPanel(

plotOutput("barPlot", height=700)

)

)

))