TLX

{

"$schema": "https://vega.github.io/schema/vega-lite/v5.json",

"description": "A horizontal box plot showing median, min, and max body mass of penguins.",

"height":250,

"width":250,

"data": {"url": "https://raw.githubusercontent.com/HZXZHANG/ist526/main/Scores%20-%20Sheet1.csv"},

"mark": {"type": "boxplot", "extent": "min-max"},

"encoding": {

"y": {"field": "TLX", "type": "quantitative"},

"x": {

"field": "Condition",

"type": "nominal"

}

}

}

SUS

{

"$schema": "https://vega.github.io/schema/vega-lite/v5.json",

"description": "A horizontal box plot showing median, min, and max body mass of penguins.",

"height":250,

"width":250,

"data": {"url": "https://raw.githubusercontent.com/HZXZHANG/ist526/main/Scores%20-%20Sheet1.csv"},

"mark": {"type": "boxplot", "extent": "min-max"},

"encoding": {

"y": {"field": "SUS", "type": "quantitative"},

"x": {

"field": "Condition",

"type": "nominal"

}

}

}

Task1

{

"$schema": "https://vega.github.io/schema/vega-lite/v5.json",

"description": "A horizontal box plot showing median, min, and max body mass of penguins.",

"height":250,

"width":250,

"data": {"url": "https://raw.githubusercontent.com/HZXZHANG/ist526/main/SUS%20-%20Sheet12.csv"},

"mark": {"type": "boxplot", "extent": "min-max"},

"encoding": {

"y": {"field": "Time1", "type": "quantitative","title":"time(s)"},

"x": {

"field": "Condition",

"type": "nominal"

}

}

}

Task2

{

"$schema": "https://vega.github.io/schema/vega-lite/v5.json",

"description": "A horizontal box plot showing median, min, and max body mass of penguins.",

"height":250,

"width":250,

"data": {"url": "https://raw.githubusercontent.com/HZXZHANG/ist526/main/SUS%20-%20Sheet12.csv"},

"mark": {"type": "boxplot", "extent": "min-max"},

"encoding": {

"y": {"field": "Time2", "type": "quantitative","title":"time(s)"},

"x": {

"field": "Condition",

"type": "nominal"

}

}

}

Wilcoxon

data <- read.csv('/content/sample\_data/data.csv')

head(data)

c1t1avg <- (data$X)

c1t2avg <- (data$X.1)

c2t1avg <- (data$X.2)

c2t2avg <- (data$X.3)

susavgc1 <- mean(data$score.C1)

View(susavgc1)

susavgc2 <- mean(data$score.C2)

View(susavgc2)

#t.test(c1t1avg, c1t2avg, paired = TRUE, var.equal = TRUE, conf.level=0.95)

wilcox.test(c1t1avg, c2t1avg, paired = TRUE)

wilcox.test(c1t2avg, c2t2avg, paired = TRUE)

hist(c1t1avg,main="c1t1avg")

# /content/sample\_data/airtravel.csv