App : https://jkauser.shinyapps.io/ConfidenceIntervalApp/

Decription:

This Shiny application is an imitation of repeated sampling of a normal population and creates confidence intervals of the population mean. It shows visually the repetition of confidence intervals in capturing the true mean.

Features:

- Variable sample size (slider)
- Simulation number adjustable (slider)
- Choosable confidence level (radio buttons)
- Simulation button
- Interactive plot of confidence range.

Educational Purpose:

The application shows how the notion of confidence level in statistics works. An example is the 95% confidence interval which estimates the true mean within a 95% margin of error, on repeated samples. The visualization displays which intervals have the actual means that are contained and those that are not.