**UX/HF Data Analysis Project**

This project is all about analyzing UX and Human Factors (HF) data using R Markdown. It’s designed to help researchers quickly explore, clean, and visualize their datasets while performing some basic analyses, like bootstrapping.

**What’s Included**

1. **ux\_hf\_sample\_data.csv**
   * A sample dataset with participant data (e.g., task completion time, accuracy, stress levels, and more).
2. **ux\_hf\_analysis.Rmd**
   * The R Markdown file where all the analysis happens.
   * Includes data cleaning, summary statistics, visualizations, and bootstrap confidence intervals.

**How to Use This**

1. **Clone this repository**:  
   Download the files to your computer.

bash

Copy code

git clone https://github.com/mohsen-rafiei/Bootstrapping.git

cd Bootstrapping

1. **Open the R Markdown file**:  
   Open ux\_hf\_analysis.Rmd in RStudio or your favorite R editor.
2. **Run the code**:  
   Knit the document into an HTML file (or Word/PDF, if you prefer).
3. **Explore the results**:
   * Summary statistics like averages of task completion time, accuracy, and stress levels.
   * Visualizations:
     + Task Completion Time Distribution
     + Accuracy vs. Stress Level
     + Bootstrap Distribution of Task Completion Time
   * Bootstrap confidence intervals for task completion time.

**Purpose**

This project is meant to serve as a quick-start framework for UX and HF researchers to analyze their data. It’s lightweight, customizable, and easy to adapt for your own datasets.

**Requirements**

* **R** (version 4.0 or higher recommended)
* The following R packages:
  + tidyverse
  + ggplot2

Install them with:

R

Copy code

install.packages(c("tidyverse", "ggplot2"))

**Contributing**

Found a bug or have a suggestion? Feel free to open an issue or submit a pull request. Contributions are welcome!

**License**

This project is open-source under the MIT License. Use it, modify it, and share it—just give credit where it’s due.