Using ExcelToShiny

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Vignette: Using ExcelToShiny

```
library(ggplot2)
library(ExcelToShiny)
library(readxl)
library(dplyr)
library(rio)
library(NHANES)
library(shiny)
library(shinydashboard)
```

Introduction

This vignette demonstrates how to use the `ExcelToShiny` package to create a Shiny dashboard from an Excel spreadsheet.

Loading an Excel Spreadsheet

To demonstrate the usage of `build_shiny`, we'll first load an example Excel file.

```
# Path to the example Excel file
example_excel <- rio::import_list("data/nhanes_data.xlsx")
```

Preparing the Data

We'll prepare the `NHANES` dataset by selecting individual records and ensuring that the `ID` column is in character format.

```
# Load the NHANES dataset
data(NHANES)

# Prepare the data by selecting individual records
NHANES_by_ind <- NHANES %>%
  group_by(ID) %>%
  mutate(count = 1:n()) %>%
  filter(count == 1) %>%
  ungroup()
```

```r
# Ensure that the ID column is in character format
NHANES_by_ind$ID <- as.character(NHANES_by_ind$ID)
```

Loading Credentials

We'll load the credentials required for the Shiny app. This isn't always needed - but in our example, we use this in the "Download" tab.

```r
# Source the credentials data
source("data/credentials_data.R")
```

Creating a Shiny Dashboard

Now, we will use the `build_shiny` function to create a Shiny dashboard based on the loaded Excel file and prepared data.

```r
# Create the Shiny dashboard using the Excel file and prepared data
build_shiny(title = "Testing Shiny Dashboard",
            data_list = example_excel,
            data_frame = NHANES_by_ind,
            status = "primary",
            colour = "blue",
            key_var = "ID")
```

The `build_shiny()` function generates a Shiny app.

Conclusion

This vignette has shown how to use the `ExcelToShiny` package to generate a Shiny dashboard from an Excel spreadsheet and a prepared dataset.

There is documentation on the different elements of the Excel Spreadsheet available.