Introduction to R & ActivityInfo

Presented by Alex Bertram 2022-09-22



Presentation outline

- What is R?
- Set up
- Connecting to ActivityInfo
- Retrieving ActivityInfo data with R
- Updating ActivityInfo databases with R



Introduction to R

What is R?

R is an open source programing language and environment for statistical computing.

R has origins in the S language, created in the 1980s at Bell Labs.

The R package repository has over 18,000 packages covering every conceivable domain.



RStudio

RStudio is a user-friendly Integrated Development Environment (IDE) for the R language.



Tidy data and the Tidyverse

The tidyverse is a collection of R packages designed for data science.

All packages share an underlying design philosophy, grammar, and data structures.



Set up

Getting set up

- 1. Install R (Windows)
- 2. Install RStudio



Getting set up - packages

```
install.packages("remotes")
remotes::install_github("bedatadriven/activityinfo-R")
install.packages("tidyverse")
# Go make some coffee :-)
```

Getting set up - authentication

- 1. Add a Personal API token
- 2. activityInfoLogin()



Query ActivityInfo from R (and a quick intro to R)

Some useful functions from activityinfo-R...

- getDatabases()
- getDatabaseTree(databaseId)
- queryTable()



Bringing data into ActivityInfo

Bringing data into Al

- addRecord()
- updateRecord()
- importTable()



More resources on learning R

- Getting started with data in R
- R for Data Science book
- A Gentle Introduction to Tidy Statistics in R

