**DEVELOPER GUIDE**

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**Prerequisites**

Please install the following before beginning development work:

* R (<https://cran.r-project.org>)
* (recommended) RStudio IDE (<https://rstudio.com/products/rstudio/download/>)

**Introduction**

The scripts are found in the scripts folder. There are a total of 6 R scripts in this folder.

scripts

├── Developer\ Guide.docx

├── User\ Guide.docx

├── modules

│   ├── dup\_rows.r

│   ├── main\_logic.r

│   ├── match\_gps.r

│   ├── sort\_bat\_data.r

│   └── util.r

└── process\_meta.r

process\_meta.r: main entry-point for the entire program

modules: folder abstracting the program logic

main\_logic.r: invokes each data processing task for each session data folder

dup\_rows.r: script to duplicate rows in a CSV file based on column values

sort\_bat\_data.r: script to copy and sort .wav files

match\_gps.r: script to match GPS data obtained from handheld GPS devices

util.r: miscellaneous functions to support the program

**Getting started**

The R scripts can be run in the RStudio IDE (recommended) or the R command prompt.

To run the entire program, simply source the script in process\_meta.r to process folders in the working directory. Alternatively, each R script can also be run independently of one another.

See the User Guide for more details on how to run R scripts in the RStudio IDE.

**Program details**

The entire program is captured in the following sequence diagram:

Diagram

Description automatically generated

Refer to the code comments in each script for further details on how each script works.