

Package ‘unisensR’

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Type Package

Title Read 'Unisens' Data

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Description Provides the ability to read 'Unisens' data into R. 'Unisens' is a universal data format for multi sensor data.

Depends R (>= 3.2.0)

Imports XML (>= 1.0.0), hexView, vroom

License LGPL

URL <https://unisens.org/>

BugReports <https://github.com/Unisens/unisensR/issues>

Encoding UTF-8

RoxygenNote 7.3.2

Suggests testthat

NeedsCompilation no

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getUnisensCustomAttributes
Get Unisens Custom Attributes

Description

Get Unisens Custom Attributes

Usage

```
getUnisensCustomAttributes(unisensFolder)
```

Arguments

unisensFolder Unisens Folder

Value

hash map of all custom attributes

Examples

```
unisensPath <- system.file('extdata/unisensExample', package = 'unisensR', mustWork = TRUE)
getUnisensCustomAttributes(unisensPath)
```

getUnisensMeasurementId
Get Unisens Measurement Id Time

Description

Get Unisens Measurement Id Time

Usage

```
getUnisensMeasurementId(unisensFolder)
```

Arguments

unisensFolder Unisens Folder

Value

string measurement id

Examples

```
unisensPath <- system.file('extdata/unisensExample', package = 'unisensR', mustWork = TRUE)
getUnisensMeasurementId(unisensPath)
```

`getUnisensSignalSampleCount`
Get Unisens Signal Sample Count

Description

Get Unisens Signal Sample Count

Usage

```
getUnisensSignalSampleCount(unisensFolder, id)
```

Arguments

<code>unisensFolder</code>	Unisens Folder
<code>id</code>	ID of the signal entry

Value

Long

Examples

```
unisensPath <- system.file('extdata/unisensExample', package = 'unisensR', mustWork = TRUE)
getUnisensSignalSampleCount(unisensPath, 'ecg.bin')
```

`readUnisensEventEntry` *Read Unisens Event Entry*

Description

Read Unisens Event Entry

Usage

```
readUnisensEventEntry(unisensFolder, id)
```

Arguments

unisensFolder	Unisens Folder
id	ID of the event entry.

Value

DataFrame.

Examples

```
unisensPath <- system.file('extdata/unisensExample', package = 'unisensR', mustWork = TRUE)
readUnisensEventEntry(unisensPath, 'qrs-trigger.csv')
```

```
readUnisensSignalEntry
```

Read Unisens Signal Entry

Description

Read Unisens Signal Entry

Usage

```
readUnisensSignalEntry(
  unisensFolder,
  id,
  startIndex = 1,
  endIndex = getUnisensSignalSampleCount(unisensFolder, id),
  readInChunks = FALSE,
  readChunkSize = 2^16
)
```

Arguments

unisensFolder	String containing path to Unisens folder.
id	String containing ID of the signal entry.
startIndex	Integer of the value-index on which the read process starts, default: 1.
endIndex	Integer of the value-index on which the read process ends, default: last Index of file.
readInChunks	Boolean determines if the reading process is done in chunks. This could be useful if you run into memory limits when reading big files. default: FALSE.
readChunkSize	Integer defining the size of chunks if chunk reading is enabled, defined in samples, default: 2 ¹⁶ .

Value

DataFrame.

Examples

```
unisensPath <- system.file('extdata/unisensExample', package = 'unisensR', mustWork = TRUE)
readUnisensSignalEntry(unisensPath, 'ecg.bin')
```

`readUnisensStartTime` *Read Unisens Start Time*

Description

Read Unisens Start Time

Usage

```
readUnisensStartTime(unisensFolder)
```

Arguments

`unisensFolder` Unisens Folder

Value

POSIXct unisens start time

Examples

```
unisensPath <- system.file('extdata/unisensExample', package = 'unisensR', mustWork = TRUE)
readUnisensStartTime(unisensPath)
```

`readUnisensValuesEntry`
Read Unisens Values Entry

Description

Read Unisens Values Entry

Usage

```
readUnisensValuesEntry(unisensFolder, id)
```

Arguments

unisensFolder Unisens Folder
id ID of the values entry.

Value

DataFrame.

Examples

```
unisensPath <- system.file('extdata/unisensExample', package = 'unisensR', mustWork = TRUE)
readUnisensValuesEntry(unisensPath, 'rr.csv')
```

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