Package 'CirceR'

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Type Package

Title Construct Cohort Inclusion and Restriction Criteria Expressions

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Description Wraps the 'CIRCE' (<https://github.com/ohdsi/circe-be>) 'Java' library allowing cohort definition expressions to be edited and converted to 'Markdown' or 'SQL'.

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URL https://ohdsi.github.io/CirceR/, https://github.com/OHDSI/CirceR/

BugReports https://github.com/OHDSI/CirceR/issues/

SystemRequirements Java (>= 8)

Depends R (>= 3.5.0)

Imports rJava, RJSONIO

Suggests testthat, knitr, rmarkdown, reticulate

NeedsCompilation no

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`buildCohortQuery` *Build cohort SQL*

Description

Generates the OMOP CDM Sql to generate the cohort expression

Usage

```
buildCohortQuery(expression, options)
```

Arguments

`expression`	result of cohortExpressionFromJson containing the cohort expression.
`options`	The options built using createGenerateOptions()

Value

A character vector containing the OHDSI Sql for the cohort expression

---

`buildConceptSetQuery` *Build conceptset SQL*

Description

Generates the OMOP CDM Sql to resolve the concept set expression

Usage

```
buildConceptSetQuery(conceptSetJSON)
```

Arguments

`conceptSetJSON`	a string containing the JSON for the conceptset expression.

Value

A character vector containing the OHDSI Sql for the conceptset expression

---

cohortDefinitionJson *An example cohort definition*

Description

An example cohort definition

Usage

```
data(cohortDefinitionJson)
```

Format

A character vector containing a JSON string

Details

An example cohort expression in JSON format

---

cohortExpressionFromJson *Render read JSON into a CohortExpression instance*

Description

Reads a String (json) and deserializes it into a org.ohdsi.circe.cohortdefinition.CohortExpression

Usage

```
cohortExpressionFromJson(expressionJson)
```

Arguments

expressionJson	A character vector containing the cohort expression.

Value

A java instance of org.ohdsi.circe.cohortdefinition.CohortExpression.

`cohortPrintFriendly` *Render cohort print-friendly*

Description

Generates a print-friendly (human-readable) representation of the cohort definition. This can for example be used in a study protocol.

Usage

```
cohortPrintFriendly(expression)
```

Arguments

`expression`	A character vector or result of cohortExpressionFromJson containing the cohort expression.

Value

A character vector containing the markdown.

`conceptSetExpressionFromJson` *Render read JSON into a ConceptSetExpression instance*

Description

Reads a String (json) and deserializes it into a org.ohdsi.circe.vocabulary.CohortExpression

Usage

```
conceptSetExpressionFromJson(expressionJson)
```

Arguments

`expressionJson`	A character vector containing the cohort expression.

Value

A java instance of org.ohdsi.circe.cohortdefinition.CohortExpression.

conceptSetJson *An example concept set*

Description

An example concept set

Usage

```
data(conceptSetJson)
```

Format

A character vector containing a JSON string

Details

An example concept set in JSON format

conceptSetListJson *An example concept set list*

Description

An example concept set list

Usage

```
data(conceptSetListJson)
```

Format

A character vector containing a JSON string

Details

An example concept set list in JSON format

`conceptSetListPrintFriendly`

Render conceptSet array for print-friendly

Description

Generates a print-friendly (human-readable) representation of an array of concept sets. This can for example be used in a study protocol.

Usage

```
conceptSetListPrintFriendly(conceptSetList)
```

Arguments

`conceptSetList`	A ConceptSet[] (from cohortExpression.conceptSets), a JSON string, or a list from RJSONIO::fromJson

Value

A character vector containing the markdown.

`conceptSetPrintFriendly`

Render conceptSet array for print-friendly

Description

Generates a print-friendly (human-readable) representation of a single concept set. This can for example be used in a study protocol.

Usage

```
conceptSetPrintFriendly(conceptSet)
```

Arguments

`conceptSet`	A ConceptSet (from cohortExpression.conceptSets[i]), a JSON string, or a list from RJSONIO::fromJson

Value

A character vector containing the markdown.

createGenerateOptions *Create Generation Options*

Description

Creates the generation options object for use in generateSql()

Usage

```
createGenerateOptions(
  cohortIdFieldName,
  cohortId,
  cdmSchema,
  targetTable,
  resultSchema,
  vocabularySchema,
  generateStats
)
```

Arguments

cohortIdFieldName	The field that contains the cohortId in the cohort table.
cohortId	The generated cohort ID.
cdmSchema	The value of the CDM schema.
targetTable	the cohort table name.
resultSchema	the schema the cohort table belongs to.
vocabularySchema	the schema of the vocabulary tables (defaults to cdmSchema)
generateStats	a boolean representing if the query should include inclusion rule statistics calculation

Value

A jObj that can be passed to generateSql().

enablePythonBackend *Enables the Python backend*

Description

Sets the CIRCER_BACKEND environment variable to 'python'.

Usage

```
enablePythonBackend()
```

usePythonBackend *Checks if the Python backend is enabled*

Description

Checks if the Python backend is enabled

Usage

```
usePythonBackend()
```

Value

TRUE if CIRCER_BACKEND environment variable is set to 'python', FALSE otherwise.

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