Package 'CatMapR'

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Type Package

Title This package interfaces with the CatMapper application API (catmapper.org).

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Description CatMapper organizes dynamic and complex category systems commonly used by scientists and policymakers, including ethnicities, languages, religions, political districts, political parties, and technologies. Each of these systems includes thousands of categories encoded in diverse, dynamic and incompatible ways across a growing corpus of thousands of datasets. CatMapper assists users in (1) exploring key contextual information about categories of interest (e.g., Aymara ethnicity, Balochi language, Rajshahi district), (2) identifying which of thousands of datasets contain information about specific categories, and (3) reconciling distinct and incompatible encodings for the same category across diverse datasets to enable novel analyses. CatMapper currently houses two apps—SocioMap and ArchaMap.
SocioMap organizes the thousands of sociopolitical categories—e.g., ethnicities, languages, religions, districts, and political parties—frequently used by social scientists and policymakers. Users can search for basic contextual information on each category—geographical location, population size, alternative names, and language—as well as the datasets containing specific social, demographic, cultural and economic data for each category. In the future, SocioMap will also provide tools for facilitating and sharing merges of diverse and heterogenous external datasets by these category systems to enable novel analyses.
ArchaMap will organize artifact types—e.g., ceramics, lithics—frequently used by archaeologists in analyses of material culture. ArchaMap will share SocioMap's functionalities for merging data from multiple sources by diverse category systems.

License GNU GPL

Encoding UTF-8

LazyData true

Suggests roxygen2

Roxygen list(markdown = TRUE)

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Depends httr,
jsonlite,
tictoc,
xml2

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allDatasets   *Retrieve All Datasets from a Specified Database*

Description

This function retrieves detailed information about all datasets from a specified database. It returns information such as dataset identifiers, names, applicable years, project details, and other relevant metadata.

Usage

```
allDatasets(database)
```

Arguments

database   A string specifying the database from which to retrieve datasets. Valid options
                    are "SocioMap" or "ArchaMap".

Value

A list containing detailed information about each dataset, or an error message if the request fails. The list includes fields such as nodeID, CMName, CMID, shortName, project, Unit, parent, ApplicableYears, and more.

Examples

```
allDatasets(database = "SocioMap")
allDatasets(database = "ArchaMap")
```

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callAPI   *Call API*

Description

This is a helper function to call the API. It takes the endpoint, parameters, request type, and URL as input and returns the API response.

Usage

```
callAPI(
  endpoint,
  parameters,
  request = "GET",
  url = "https://catmapper.org/api",
  type = "default"
)
```

Arguments

endpoint   API endpoint

parameters   API parameters

request   GET or POST

url   API URL

type   default or stream

Value

API response

Examples

```
callAPI(endpoint = "search", parameters = list(term = "Dan", database = "SocioMap", property = "Name", domain =
```

CMIDinfo   *Retrieve Details for a Specific CMID (CatMapperID)*

Description

This function retrieves detailed information about a specified CatMapperID (CMID) from a specified database. It fetches both node properties and their relationships associated with the given CMID.

Usage

```
CMIDinfo(database, cmid)
```

Arguments

database   A string specifying the database to search in. Valid options are "SocioMap" or
                "ArchaMap".

cmid   The CatMapperID for which details are to be retrieved (e.g., "SM1" or "AM1").

Value

A list containing node properties and relationships associated with the specified CMID, or an error
message if the request fails.

Examples

```
CMIDinfo(database = "SocioMap", cmid = "SM1")
CMIDinfo(database = "ArchaMap", cmid = "AM1")
```

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datasetInfo   *Retrieve Dataset Information by CMID*

Description

This function retrieves detailed information about a dataset based on a given CMID (CatMapperID)
from a specified database, with an optional domain filter. It fetches relationships and properties of
datasets associated with the specified CMID.

Usage

```
datasetInfo(database, CMID, domain = "CATEGORY")
```

Arguments

database   A string specifying the database to search in. Valid options are "SocioMap" or
                "ArchaMap".

CMID   The CMID of the dataset to retrieve information for (e.g., "SD1" or "AD1").

domain   (Optional) A category to filter dataset relationships. Defaults to "CATEGORY"
                if not specified.

Value

A list containing detailed information about the dataset, or an error message if the request fails.

Examples

```
datasetInfo(database = "SocioMap", CMID = "SD1", domain = "CATEGORY")
datasetInfo(database = "ArchaMap", CMID = "AD1")
```

hello	*Hello, World!*

Description

Prints 'Hello, world!'.

Usage

```
hello()
```

Examples

```
hello()
```

searchDatabase	*Search*

Description

Search for a term in a database and retrieve the CMID (CatMapperID) and CMName (CatMapper Name).

Usage

```
searchDatabase(
  database,
  domain = NULL,
  term = NULL,
  property = "Name",
  yearStart = NULL,
  yearEnd = NULL,
  country = NULL,
  context = NULL,
  limit = 1000
)
```

Arguments

database	name of database (SocioMap or ArchaMap)
domain	name of category domain to search for (DISTRICT, ETHNICITY, etc.)
term	search term ("Afghanistan")
property	property to search by (Name, CMID, or Key)
yearStart	year to search by start
yearEnd	year to search by end
country	country to search by (must be a CMID)
context	context to search by (e.g., hierarchical category as in the state for a county–must be a CMID)
limit	limit number of results

Value

dataframe

Examples

```
searchDatabase(database = "SocioMap",domain = "ETHNICITY", term = "Dan",property = "Name", yearStart = NULL, ye
```

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translate   *Translate*

Description

This function translate a dataframe by matching the specified term with the property in the database.

Usage

```
translate(
  rows,
  database,
  term,
  property = "Name",
  domain = "CATEGORY",
  context = NULL,
  country = NULL,
  dataset = NULL,
  yearStart = NULL,
  yearEnd = NULL,
  key = "false",
  query = "false"
)
```

Arguments

database	database to use (SocioMap or ArchaMap)
term	column name to translate
property	property to search by (Name, CMID, or Key)
domain	name of category domain to search for (DISTRICT, ETHNICITY, etc.)
context	column name of context to search by (CMID)
country	column name of country to search by (CMID)
yearStart	year to search by start
yearEnd	year to search by end
query	return query instead of results

Value

dataframe

Examples

```
df = data.frame(country = "Afghanistan")
translate(rows = df, database = "SocioMap",domain = "ADM0", term = "country", property = "Name", yearStart = NUL
```

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