rdfpandas

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CHAPTER 1

rdfpandas

1.1 rdfpandas package

1.1.1 Submodules

1.1.2 rdfpandas.graph module

`rdfpandas.graph.`**`to_dataframe`**(*g: rdflib.graph.Graph*) → pandas.core.frame.DataFrame

Takes rdfLib Graph object and creates Pandas DataFrame. Indices are subjects and attempt is made to construct CURIEs using namespace manager of the rdfLib Graph. Columns are predicates and attempt is made to construct CURIEs using namespace manager of the rdfLib Graph, similar to indices. Column names are created using "predicate{rdfLib Identifier instance class name}(type)[index]@language" pattern to allow for round trip conversion. Multiple objects for the same subject and predicate result in columns with index in its name. No attemps are made at type conversion, all objects are strings in the DataFrame.

g [rdflib.Graph] rdfLib Graph.

pd.DataFrame Pandas DataFrame created from rdfLib Graph.

`rdfpandas.graph.`**`to_graph`**(*df: pandas.core.frame.DataFrame, namespace_manager: rdflib.namespace.NamespaceManager = None*) → rdflib.graph.Graph

Takes Pandas DataFrame and returns RDFLib Graph. Row indices are used as subjects and column indices as predicates. Object types are inferred from the column index pattern of "predicate{rdfLib Identifier instance class name}(type)[index]@language". Index numbers simply create additoinal statements as opposed to attempting to construct a new rdfs:List or rdfs:Container. Namespaces need to be bound by the user of the method prior to serialization.

df [pandas.DataFrame] DataFrame to be converted into Graph.

namespace_manager [rdflib.namespace.NamespaceManager] NamespaceManager to use to normalize URIs

rdflib.Graph Graph created from Pandas DataFrame.

1.1.3 Module contents

CHAPTER 2

Introduction

RdfPandas is a module providing RDF support for Pandas. It consists of two simple functions for Graph to DataFrame conversion and DataFrame to Graph conversion.

For more details and the source code see https://github.com/cadmiumkitty/rdfpandas/

We run Semantic Web London meetup https://www.meetup.com/semantic-web-london/

CHAPTER 3

Indices and tables

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