
graphtransliterator-js

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Javascript/Node interface to [Graph Transliterator](#), a graph-based transliteration tool that lets you convert the symbols of one language or script to those of another using rules that you define.

- Free software: MIT license
- Documentation: <https://graphtransliterator-js.readthedocs.io>
- Repository: <https://github.com/seanpue/graphtransliterator-js>

INSTALLATION

```
$ npm install --save graphtransliterator
```

1.1 API Reference

A list of the full API reference of all public classes and functions is below.

1.1.1 Core Classes

class GraphTransliterator(*settings*)

Create a GraphTransliterator.

Arguments

- **settings** (*Object*) –

GraphTransliterator.isWhitespace(*token*)

Check if a token is whitespace.

Returns **boolean** –

GraphTransliterator.lastMatchedRuleTokens

Get the last tokens matched.

GraphTransliterator.lastMatchedRules

Get the last rules matched.

GraphTransliterator.matchAllAt(*tokenIdx*, *tokens*)

Match all tokens at a particular index.

Arguments

- **tokenIdx** (*number*) –
- **tokens** (*Array*) –

Returns **undefined|Array** – List of rule indexes

GraphTransliterator.matchAt(*tokenIdx*, *tokens*, *matchAll=false*)

Match best (least costly) transliteration rule at a given index in the input tokens and return the index to that rule. Optionally, return all rules that match.

Arguments

- **tokenIdx** (*number*) – Location in *tokens* at which to begin

- **tokens** (*Array*) – List of strings of tokens
- **matchAll** (*boolean*) – If true, return the index of all rules matching at the given index.
The default is false.

Returns (*undefined|number|Array*) - Index of rule matched or list of rules matched

`GraphTransliterator.tokenize (input)`

Tokenize input string.

Arguments

- **input** (*string*) – Input string

Returns **Array** – - match details

`GraphTransliterator.transliterate (input)`

Transliterate an input string into an output string.

Whitespace will be temporarily appended to start and end of input string.

Arguments

- **input** (*string*) –

Throws `UnrecognizableInputTokenError` –

Returns **string** – Transliterated input string.

`GraphTransliterator.fromDict (dictSettings)`

Create a GraphTransliterator from settings. (From Python implementation, can be removed.)

Arguments

- **dictSettings** (*object*) – Compressed or decompressed settings.

Returns **GraphTransliterator** –

class DirectedGraph (edge, node, edge_list)

DirectedGraph

Graph data structure used in Graph Transliterators.

Arguments

- **edge** (*object*) – Mapping from head to tail of edge, holding edge data
- **node** (*Array*) – Array of node attributes
- **edge_list** (*Array*) – Array of head and tail of each edge

`DirectedGraph.addEdge (head, tail, edgeData)`

Add new edge.

Arguments

- **head** (*number*) – Index of head of edge
- **tail** (*number*) – Index of tail of edge
- **edgeData** (*Object*) – Attributes of edge

Returns **Object** – - Reference to new edge

`DirectedGraph.addNode (nodeData)`

Arguments

- **nodeData** (*object*) – Attributes for node

Returns `Array.<number, number>` -- Index of new node

1.1.2 Bundled Transliterations

```
class Example()
    Example transliterator

class ITRANSDevanagariToUnicode()
    ITRANSDevanagariToUnicode transliterator
```

1.1.3 Errors

```
class GraphTransliteratorError()
    Base Graph Transliterator error.

class NoMatchingTransliterationRuleError()
    Graph Transliterator no matching transliteration rule error.

class UnrecognizableInputTokenError()
    Graph Transliterator unrecognizable token error.
```

1.2 Indices and tables

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- search

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