
ehownet

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1.1 Git

<https://github.com/emfomy/ehownet>

1.2 PyPI

<https://pypi.org/project/ehownet>

1.3 Documentation

<http://ehownet.readthedocs.io/>

1.4 Author

- Mu Yang <emfomy@gmail.com>

1.5 Requirements

- Python 3.5+
- PLY (Python Lex-Yacc) 3.11+

- TreeLib 1.5.5+
- wcwidth 0.1.7+

1.6 Installation

```
pip install ehownet -U
```

2.1 E-HowNet Parser

See <http://ehownet.readthedocs.io/src/grammar.html> for E-HowNet grammar.

2.1.1 CLI

```
# Usage
ehn-parser <text> [<text> ...]

# Example
ehn-parser \
    "{MusicTool|_x:predication={own|:possession={|PushingButton:whole={x}}}}\" \
    "{InstitutePlace|:telic={or({experiment|:location={~}},{research|:location={~}})}\"
↪ " \
    "TimePoint={},manner={urgent|}"
```

Output:

2.1.2 Python API

```
from ehn.parse import EhnParser

text = '{MusicTool|_x:predication={own|:possession={|PushingButton:whole={x}}}}'

parser = EhnParser()
ress = parser(text, debug=False)
for res in ress:
    print(res)
```

Output:

CHAPTER 3

License



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4.1 Text

TEXT [A-Za-z0-9\x80-\U0010FFFF|+|-|.]+

NUMBER e.g. 1, 0.1, 1e-4

COINDEX x[0-9]*

4.2 Node

4.2.1 Entity

ehn.node.EhnNormalEntity

- {TEXT}
- {TEXT:FEATURE}
- {TEXT:FEATURE,FEATURE}
- {TEXT:FEATURE,FEATURE,...}
- {TEXT_COINDEX:FEATURE}
- {TEXT_COINDEX:FEATURE,FEATURE}
- {TEXT_COINDEX:FEATURE,FEATURE,...}

ehn.node.EhnFunctionEntity

- {FUNCTION}
- {FUNCTION:FEATURE}
- {FUNCTION:FEATURE,FEATURE}

- {FUNCTION:FEATURE, FEATURE, ...}
- {FUNCTION_COINDEX:FEATURE}
- {FUNCTION_COINDEX:FEATURE, FEATURE}
- {FUNCTION_COINDEX:FEATURE, FEATURE, ...}

ehn.node.EhnAnyEntity {}

ehn.node.EhnTildeEntity {~} (deprecated)

ehn.node.EhnNameEntity {"TEXT"}

ehn.node.EhnNumberEntity {NUMBER}

ehn.node.EhnCoindexEntity {COINDEX}

4.2.2 Feature

ehn.node.EhnNormalFeature

- TEXT=ENTITY
- TEXT=RESTRICTION

ehn.node.EhnFunctionFeature

- FUNCTION=ENTITY
- FUNCTION=RESTRICTION

4.2.3 Function

ehn.node.EhnFunction

- TEXT()
- TEXT(RESTRICTION)
- TEXT(ENTITY)
- TEXT(ENTITY, ENTITY)
- TEXT(ENTITY, ENTITY, ...)

4.2.4 Restriction

ehn.node.EhnRestriction

- /ENTITY
- /ENTITY_COINDEX

4.3 Valid Expression

ENTITY or any number of FEATURES joined by , s.

4.3.1 Examples

- ENTITY
- FEATURE
- FEATURE, FEATURE
- FEATURE, FEATURE, FEATURE

5.1 Submodules

5.1.1 ehnode module

```
class ehnode.EhnNodeBase
    Bases: object

    head
        Head name of this node.

    nodes()
        Yield all descendant nodes (including self) of this node.

    tree()
        Get tree representation of this node.

class ehnode.EhnFunctionHeadBase
    Bases: object

    head

    function

class ehnode.EhnAnchor (head=None)
    Bases: object

class ehnode.EhnRootNode (*features)
    Bases: ehnode.EhnNodeBase

    features

    add_feature (feature)

class ehnode.EhnEntityBase
    Bases: ehnode.EhnNodeBase
```

```
class ehn.node.EhnNormalEntity(head, *features, anchor=)
    Bases: ehn.node.EhnEntityBase

    anchor

    features

    add_feature(feature)

class ehn.node.EhnFunctionEntity(function, *features, anchor=)
    Bases: ehn.node.EhnFunctionHeadBase, ehn.node.EhnNormalEntity

class ehn.node.EhnAnyEntity
    Bases: ehn.node.EhnEntityBase

    head
        Head name of this node.

class ehn.node.EhnTildeEntity
    Bases: ehn.node.EhnEntityBase

    head
        Head name of this node.

class ehn.node.EhnNameEntity(head)
    Bases: ehn.node.EhnEntityBase

class ehn.node.EhnNumberEntity(head)
    Bases: ehn.node.EhnEntityBase

class ehn.node.EhnCoindexEntity(head)
    Bases: ehn.node.EhnEntityBase

class ehn.node.EhnFeatureBase
    Bases: ehn.node.EhnNodeBase

class ehn.node.EhnNormalFeature(head, value)
    Bases: ehn.node.EhnFeatureBase

    value

class ehn.node.EhnFunctionFeature(function, value)
    Bases: ehn.node.EhnFunctionHeadBase, ehn.node.EhnNormalFeature

class ehn.node.EhnFunction(head, *arguments)
    Bases: ehn.node.EhnNodeBase

    arguments

    add_argument(argument)

class ehn.node.EhnRestriction(value, anchor=)
    Bases: ehn.node.EhnNodeBase

    head
        Head name of this node.

    value

    anchor
```


5.1.2 ehnp.parse module

exception ehnp.parse.**EhnSyntaxError** (*args, pos=None)

Bases: SyntaxError

show_pos (text)

Show error position.

Parameters **text** (str) – original input text

class ehnp.parse.**EhnLexer** (**kwargs)

Bases: ehnp.parse._EhnLexer

E-HowNet Lexer.

class ehnp.parse.**EhnParser** (lexer=None, **kwargs)

Bases: ehnp.parse._EhnParser

E-HowNet Parser.

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Todo List

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