

My Project

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Chapter 1

Class Index

1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

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Chapter 2

Class Documentation

2.1 ModInterface Class Reference

Public Member Functions

- void **addModality** ([Node](#) modality)
- set< int > **getRequirements** ()
- bool **hasRequirements** ()
- void **print** ()
- void **print** ([Ontology](#) O)
- bool **compare** (const [ModInterface](#) &b)
- bool **operator==** ([ModInterface](#) &d)
- vector< [ModInterface](#) > **makeChildren** ([Ontology](#) myOntology)

Protected Attributes

- set< int > **currentModalities**
- set< int > **requirementsMet**
- set< int > **requirementsLeft**
- map< int, int > **attributes**

The documentation for this class was generated from the following files:

- modinterface.h
- modinterface.cpp

2.2 Node Class Reference

Public Member Functions

- **Node** (string name, int id)

- int **getID** ()
- void **printNode** ()
- void **setID** (int n_id)
- void **setName** (string n_name)
- void **addLink** (string l_name, int end_node)
- void **addLink** ([Olink](#) l)
- void **addBackLink** ([Olink](#) l)
- void **fixLinks** ()
- vector< [Olink](#) > **getLinks** ()
- vector< [Olink](#) > **getLinks** (set< string > Relationships)
- set< int > **getRequirements** ()
- set< int > **getResourcesProvided** ()
- set< int > **getSuppliers** ()
- map< int, int > **getAttributes** ()
- vector< [Olink](#) > **getBackLinks** ()
- vector< [Olink](#) > **getBackLinks** (set< string > Relationships)
- string **getName** ()

The documentation for this class was generated from the following files:

- node.h
- node.cpp

2.3 Olink Class Reference

Public Member Functions

- **Olink** (string n_name, int node1, int node2)
- void **printLink** ()
- void **setName** (string n_name)
- void **setStart** (int node_id)
- void **setEnd** (int node_id)
- void **setInfo** (string n_name, int node1, int node2)
- void **setInfo2** (string n_name, int node2)
- void **setValue** (int v)
- int **getStart** ()
- int **getEnd** ()
- string **getName** ()
- bool **isValued** ()
- int **getValue** ()

The documentation for this class was generated from the following files:

- olink.h
- olink.cpp

2.4 Ontology Class Reference

Public Member Functions

- **Ontology** (std::string const &filename)
- void **printOntology** ()
Print out everything in the ontology.
- void **AddNode** (string n_name, int n_id)
Add a node to the ontology with name and id. Creates the node from the information.
- void **AddNode** (Node new_node)
Add a node to the ontology.
- void **printDotFile** (string filename)
print the ontology as a dot graphic file format
- void **listInterfaceAttributes** (queue< int > modalities)
- bool **isRobotEquipment** (Node node)
- Node **getNode** (int nodeID)
- int **getReqID** ()
- Node **getReqNode** ()

Protected Member Functions

- void **addBackLinks** ()

Protected Attributes

- vector< Node > **Nodes**
- int **num_nodes**
- int **requirements_node_id**
- int **operator_node_id**
- int **robot_node_id**
- int **environment_node_id**

The documentation for this class was generated from the following files:

- ontology.h
- ontology.cpp

2.5 SearchTree Class Reference

Public Member Functions

- **SearchTree** (Ontology database)
- void **selectInterfacesSample** ()

- void **addNode** ([ModInterface](#) newNode)
- void **addNode** (vector< [ModInterface](#) > nodeList)
- [ModInterface](#) **returnNext** ()
- bool **isEmpty** ()

Protected Attributes

- queue< [ModInterface](#) > **SearchQueue**
- [Ontology](#) **myOntology**
- set< [ModInterface](#) > **ExaminedNodes**

The documentation for this class was generated from the following files:

- searchtree.h
- searchtree.cpp