

## Proyecto2

Generated by Doxygen 1.8.8

Thu Dec 1 2016 21:11:54



# Contents

<b>1</b>	<b>Class Index</b>	<b>1</b>
1.1	Class List . . . . .	1
<b>2</b>	<b>Class Documentation</b>	<b>3</b>
2.1	Astar Class Reference . . . . .	4
2.2	Matrix Class Reference . . . . .	6
2.2.1	Constructor & Destructor Documentation . . . . .	7
2.2.1.1	Matrix . . . . .	7
2.3	Node Class Reference . . . . .	8
	<b>Index</b>	<b>10</b>



# Chapter 1

## Class Index

### 1.1 Class List

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

<a href="#">Astar</a>	.....	4
<a href="#">Matrix</a>	.....	6
<a href="#">Node</a>	.....	8

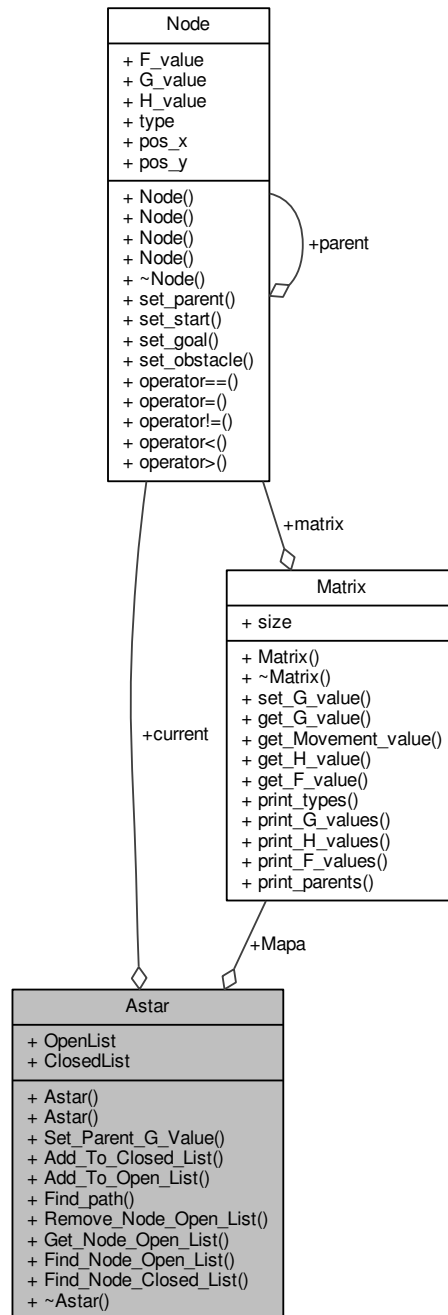


## **Chapter 2**

# **Class Documentation**

## 2.1 Astar Class Reference

Collaboration diagram for Astar:



### Public Member Functions

- **Astar** (int tam, int start\_x, int start\_y, int goal\_x, int goal\_y)
- void **Set\_Parent\_G\_Value** (Node actual)
- void **Add\_To\_Closed\_List** (Node actual)



- void **Add\_To\_Open\_List** ([Node](#) actual)
- void **Find\_path** ([Node](#) &current)
- void **Remove\_Node\_Open\_List** ()
- [Node](#) **Get\_Node\_Open\_List** ()
- int **Find\_Node\_Open\_List** (const [Node](#) a)
- int **Find\_Node\_Closed\_List** (const [Node](#) b)

### Public Attributes

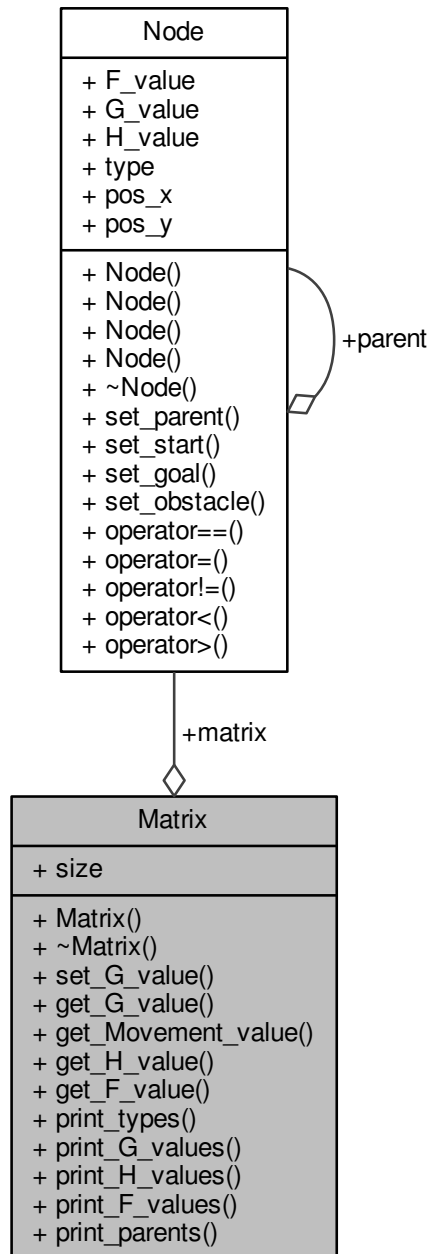
- vector< [Node](#) > **OpenList**
- vector< [Node](#) > **ClosedList**
- [Matrix](#) \* **Mapa**
- [Node](#) **current**

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

- Astar.h
- Astar.cpp

## 2.2 Matrix Class Reference

Collaboration diagram for Matrix:



### Public Member Functions

- [Matrix](#) (int tam)
- void **set\_G\_value** ([Node](#) &start)
- int **get\_G\_value** (int actual\_G, int padre\_G)

- int **get\_Movement\_value** (Node &actual, Node &Padre)
- int **get\_H\_value** (Node &actual, Node &final)
- int **get\_F\_value** (Node &actual)
- void **print\_types** ()
- void **print\_G\_values** ()
- void **print\_H\_values** ()
- void **print\_F\_values** ()
- void **print\_parents** ()

### Public Attributes

- Node \*\* **matrix**
- int **size**

## 2.2.1 Constructor & Destructor Documentation

### 2.2.1.1 Matrix::Matrix ( int *tam* )

Creacion de la matriz

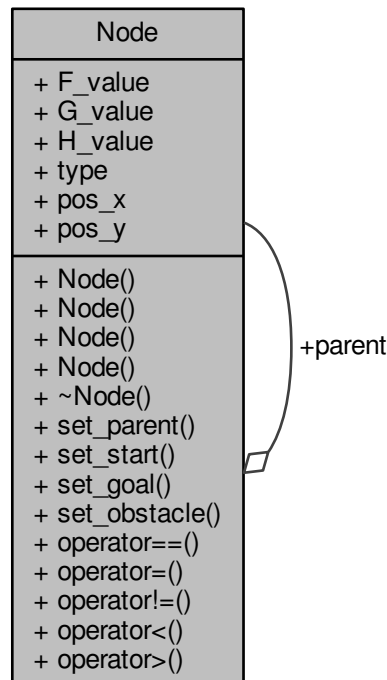
Inicializacion

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

- Matrix.h
- Matrix.cpp

## 2.3 Node Class Reference

Collaboration diagram for Node:



### Public Member Functions

- **Node** (const [Node](#) &N)
- **Node** (int x, int y)
- **Node** (int f, int g, int h, int type, [Node](#) \*father)
- void **set\_parent** ([Node](#) p)
- void **set\_start** ()
- void **set\_goal** ()
- void **set\_obstacle** ()
- int **operator==** (const [Node](#) &N) const
- [Node](#) & **operator=** (const [Node](#) &N)
- int **operator!=** (const [Node](#) &N) const
- int **operator<** (const [Node](#) &N) const
- int **operator>** (const [Node](#) &N) const

### Public Attributes

- int **F\_value**
- int **G\_value**
- int **H\_value**
- int **type**

- [Node](#) \* **parent**

*0 para nodo normal, 1 para start, 2 para goal, 3 para obstaculo y 4 para path*

- int **pos\_x**
- int **pos\_y**

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

- Node.h
- Node.cpp

# Index

Astar, [4](#)

Matrix, [6](#)  
    Matrix, [7](#)

Node, [8](#)