SS

1.0

Generated by Doxygen 1.8.16

Chapter 1

Class Index

1.1 Class List

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

Chapter 2

File Index

2.1 File List

Here is a list of all files with brief descriptions:

Chapter 3

Class Documentation

3.1 Grid Class Reference

Grid class.

Public Member Functions

- Grid ()

  Default constructor.
- Grid (float, float)

  Constructor requiring both latitude and longitude.
- void setLatitude (float)

  Sets Latitude for this grid object.
- void setLongitude (float)

  Sets Longitude for this grid object.
- float getLatitude ()

  Gets Latitude for this grid object.
- float getLongitude ()

  Gets Longitude for this grid object.
- float getDistance (Grid)

  Gets Distance from this grid object to another grid object.

3.1.1 Detailed Description

Grid class.

Variables for latitude and longitude, constructor for setting 0 to both latitude and longitude (default constructor) and a constructor for setting latitude and longitude to input values.

Methods for setting and getting latitude and longitude and for getting the distance between two points.

Definition at line 30 of file grid.cpp.

3.1.2 Constructor & Destructor Documentation

3.1.2.1 Grid() [1/2]

```
Grid::Grid ( )
```

Default constructor.

Precondition

none

Postcondition

sets values for latitude and longitude to 0

Definition at line 49 of file grid.cpp.

3.1.2.2 Grid() [2/2]

```
Grid::Grid (
            float _latitude,
            float _longitude )
```

Constructor requiring both latitude and longitude.

Precondition

Values for latitude and longitude

Postcondition

Sets values for latitude and longitude

Definition at line 58 of file grid.cpp.

3.1.3 Member Function Documentation

3.1.3.1 getDistance()

```
float Grid::getDistance (
            Grid _grid )
```

Gets Distance from this grid object to another grid object.

Precondition

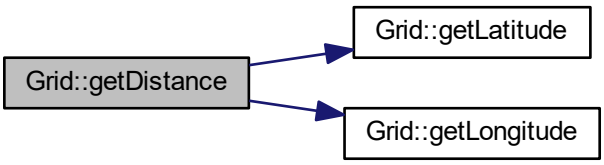
grid object must be provided

Postcondition

returns distance from this grid object to another grid object as float

Definition at line 99 of file grid.cpp.

Here is the call graph for this function:



3.1.3.2 getLatitude()

```
float Grid::getLatitude ( )
```

Gets Latitude for this grid object.

Precondition

none

Postcondition

returns latitude for grid object as float

Definition at line 83 of file grid.cpp.

Here is the caller graph for this function:

3.1.3.3 getLongitude()

```
float Grid::getLongitude ( )
```

Gets Longitude for this grid object.

Precondition

none

Postcondition

returns longitude for grid object as float

Definition at line 91 of file grid.cpp.

Here is the caller graph for this function:

3.1.3.4 setLatitude()

```
void Grid::setLatitude (
            float _latitude )
```

Sets Latitude for this grid object.

Precondition

_latitude must follow rules regarding floats

Postcondition

Sets latitude for grid object

Definition at line 67 of file grid.cpp.

3.1.3.5 setLongitude()

```
void Grid::setLongitude (
            float _longitude )
```

Sets Longitude for this grid object.

Precondition

_longitude must follow rules regarding floats

Postcondition

Sets longitude for grid object

Definition at line 75 of file grid.cpp.

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

- Doxygen/Input/grid.cpp

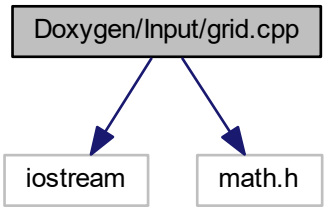
Chapter 4

File Documentation

4.1 Doxygen/Input/grid.cpp File Reference

```
#include <iostream>
#include <math.h>
```

Include dependency graph for grid.cpp:



Classes

- class Grid

  Grid class.

Index