

Coordinate Class Reference

Public Member Functions

Coordinate (double aX, double aY, double aZ)

Constructor for the **Coordinate** Class. [More...](#)

~Coordinate ()

Destructor for the **Coordinate** Class. [More...](#)

double **getX** ()

Retrieves the X **Coordinate**. [More...](#)

double **getY** ()

Retrieves the Y **Coordinate**. [More...](#)

double **getZ** ()

Retrieves the Z **Coordinate**. [More...](#)

void **setX** (const double &aX)

Sets the X **Coordinate**. [More...](#)

void **setY** (const double &aY)

Sets the Y **Coordinate**. [More...](#)

void **setZ** (const double &aZ)

Sets the Z **Coordinate**. [More...](#)

void **setXYZ** (const double &aX, const double &aY, const double &aZ)

Sets the X, Y and Z Coordinates. [More...](#)

bool **operator==** (const **Coordinate** &rhs) const

Private Member Functions

double **convertM2F** (double)

Convert Meters to Feet. [More...](#)

double **convertF2M** (double)

Convert Feet to Meters. [More...](#)

Coordinate ()

Constructor for the **Coordinate** Class. [More...](#)

Private Attributes

double **x**

double **y**

double **z**

Constructor & Destructor Documentation

◆ **Coordinate**() [\[1/2\]](#)

```
Coordinate::Coordinate ( double aX,  
                        double aY,  
                        double aZ  
                        )
```

Constructor for the **Coordinate** Class.

Parameters

aX This is the X **Coordinate**

aY This is the Y **Coordinate**

aZ This is the Z **Coordinate**

Returns

None.

◆ ~Coordinate()

```
Coordinate::~~Coordinate ( )
```

Destructor for the **Coordinate** Class.

Parameters

None.

Returns

None.

◆ Coordinate() [2/2]

```
Coordinate::Coordinate ( )
```

private

Constructor for the **Coordinate** Class.

Parameters

None.

Returns

None.

Member Function Documentation

◆ convertF2M()

```
double Coordinate::convertF2M ( double aFeet )
```

private

Convert Feet to Meters.

Parameters

double The value in Feet

Returns

double The converted value in Meters.

◆ convertM2F()

```
double Coordinate::convertM2F ( double aMeters )
```

private

Convert Meters to Feet.

Parameters

double The value in meters

Returns

The converted value in feet.

◆ getX()

```
double Coordinate::getX ( )
```

Retrieves the X **Coordinate**.

Parameters

None.

Returns

The X **Coordinate**.

◆ getY()

```
double Coordinate::getY ( )
```

Retrieves the Y **Coordinate**.

Parameters

None.

Returns

The Y **Coordinate**.

◆ getZ()

```
double Coordinate::getZ ( )
```

Retrieves the Z **Coordinate**.

Parameters

None.

Returns

The Z **Coordinate**.

◆ setX()

```
void Coordinate::setX ( const double & aX )
```

Sets the X **Coordinate**.

Parameters

aX The new value of the X **Coordinate**.

Returns

None.

◆ setXYZ()

```
void Coordinate::setXYZ ( const double & aX,  
                          const double & aY,  
                          const double & aZ  
                          )
```

Sets the X, Y and Z Coordinates.

Parameters

aX The new value of the X **Coordinate**.

aY The new value of the Y **Coordinate**.

Returns
aZ The new value of the Z **Coordinate**.
None.

◆ setY()

```
void Coordinate::setY ( const double & aY )
```

Sets the Y **Coordinate**.

Parameters

aY The new value of the Y **Coordinate**.

Returns

None.

◆ setZ()

```
void Coordinate::setZ ( const double & aZ )
```

Sets the Z **Coordinate**.

Parameters

aZ The new value of the Z **Coordinate**.

Returns

None.

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

- C:/Users/ethan/source/repos/ENPM808X_Midterm-master/include/**Coordinate.hpp**
- C:/Users/ethan/source/repos/ENPM808X_Midterm-master/app/Coordinate.cpp