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...
Eigen::Vector3d	**getAsVec** () const Returns the **Coordinate** in a Vector from Eigen (More easy for computations) 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

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,

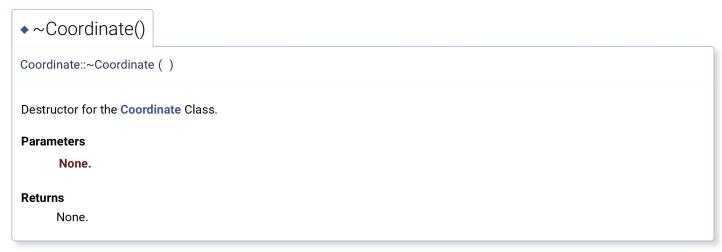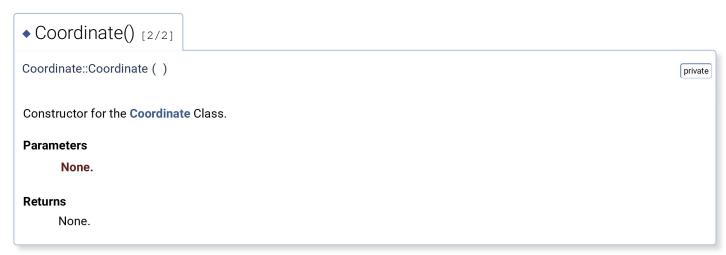   double aY,

               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

◆ getAsVec()

Eigen::Vector3d Coordinate::getAsVec ( ) const

Returns the **Coordinate** in a Vector from Eigen (More easy for computations)

Parameters

     None.

Returns

     Eigen 3 Vector of doubles Representing the Coordinates.

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

Returns
> 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/Desktop/Doxygen Environment/ENPM808X_Midterm-master/include/**Coordinate.hpp**
- C:/Users/ethan/Desktop/Doxygen Environment/ENPM808X_Midterm-master/app/Coordinate.cpp

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