C++classesDemonstratedthroughspheres

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1 Class Index

1.1 Class List

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

2 File Index

2.1 File List

Here is a list of all files with brief descriptions:

3 Class Documentation

3.1 Sphere Class Reference

```
#include <sphere.h>
```

Public Member Functions

- **Sphere** ()
- **Sphere** (double)
- double **getRadius** () const
- double **getDiameter** () const
- double **getCircumference** () const
- double **getArea** () const
- double **getVolume** () const
- void **setRadius** (double)
- std::ostream & **display** (std::ostream &)

Private Attributes

- double **radius**

3.1.1 Constructor & Destructor Documentation

3.1.1.1 Sphere() [1/2] Sphere::Sphere ( )

3.1.1.2 Sphere() [2/2] Sphere::Sphere (double *r*)

3.1.2 Member Function Documentation

3.1.2.1 display() std::ostream & Sphere::display (std::ostream & *out*)

3.1.2.2 getArea() double Sphere::getArea ( ) const

3.1.2.3 getCircumference() double Sphere::getCircumference ( ) const

3.1.2.4 getDiameter() double Sphere::getDiameter ( ) const

3.1.2.5 getRadius() double Sphere::getRadius ( ) const

3.1.2.6 getVolume() double Sphere::getVolume ( ) const

3.1.2.7 setRadius() void Sphere::setRadius (double *r*)

3.1.3 Member Data Documentation

3.1.3.1 radius double Sphere::radius [private]

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

- **sphere.h**
- **sphere.cpp**

4 File Documentation

4.1 driver.cpp File Reference

```
#include "sphere.h"
```

Functions

- std::ostream & **operator**<< (std::ostream &strm, **Sphere** &a)
- int **main** ()

4.1.1 Function Documentation

4.1.1.1 main() int main ( )

4.1.1.2 operator<<() std::ostream& operator<< (std::ostream & *strm*, **Sphere** & *a*)

4.2 sphere.cpp File Reference

```
#include "sphere.h"
```

Macros

- #define **M_PI** 3.14159265

4.2.1 Macro Definition Documentation

4.2.1.1 M_PI #define M_PI 3.14159265

4.3 sphere.h File Reference

```
#include <iostream>
```

Classes

- class **Sphere**

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