

C++classesDemonstratedthroughspheres

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1 Class Index

1.1 Class List

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

Sphere	1
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2 File Index

2.1 File List

Here is a list of all files with brief descriptions:

driver.cpp	3
sphere.cpp	4
sphere.h	4

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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