

animals

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Chapter 1

This is a small C++ example that shows the usage of inheritance, virtual methods and dynamic casts.

Author

Arno Wilhelm

Version

1.0

Since

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Chapter 2

Namespace Index

2.1 Namespace List

Here is a list of all namespaces with brief descriptions:

std	11
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Chapter 3

Hierarchical Index

3.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

Animal	13
Cat	15
Dog	17

Chapter 4

Class Index

4.1 Class List

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

Animal	.....	13
Cat	.....	15
Dog	.....	17

Chapter 5

File Index

5.1 File List

Here is a list of all files with brief descriptions:

animal.h	.....	19
main.cpp	.....	20

Chapter 6

Namespace Documentation

6.1 std Namespace Reference

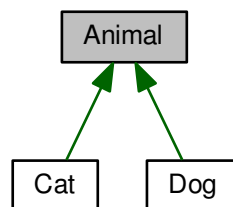
Chapter 7

Class Documentation

7.1 Animal Class Reference

```
#include <animal.h>
```

Inheritance diagram for Animal:



Public Member Functions

- `Animal` (const string &name)
- const string & `getName` () const
- virtual void `saySomething` () const =0

Private Attributes

- const string `name_`

7.1.1 Detailed Description

abstract base class of all derived animal classes.

Author

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Version

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7.1.2 Constructor & Destructor Documentation

7.1.2.1 Animal()

```
Animal::Animal (
    const string & name ) [inline]
```

Constructor

Parameters

<i>name</i>	Name of the animal.
-------------	---------------------

7.1.3 Member Function Documentation

7.1.3.1 getName()

```
const string& Animal::getName ( ) const [inline]
```

Getter returns the name of the animal.

Returns

string Returns the name of the animal.

7.1.3.2 saySomething()

```
virtual void Animal::saySomething ( ) const [pure virtual]
```

Virtual interface method must be implemented by derived classes. Depending on the type of animal they give print out an animal specific sound.

Implemented in [Cat](#), and [Dog](#).

7.1.4 Member Data Documentation

7.1.4.1 name_

```
const string Animal::name_ [private]
```

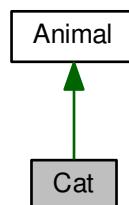
The documentation for this class was generated from the following file:

- [animal.h](#)

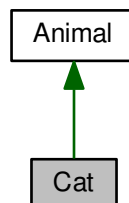
7.2 Cat Class Reference

```
#include <animal.h>
```

Inheritance diagram for Cat:



Collaboration diagram for Cat:



Public Member Functions

- [Cat](#) (const string &name)
- void [saySomething](#) () const

Additional Inherited Members

7.2.1 Detailed Description

from class [Animal](#).

Author

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Version

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See also

[Animal](#)

7.2.2 Constructor & Destructor Documentation

7.2.2.1 Cat()

```
Cat::Cat (
    const string & name ) [inline]
```

7.2.3 Member Function Documentation

7.2.3.1 saySomething()

```
void Cat::saySomething ( ) const [inline], [virtual]
```

Implements the saySomething method of base class [Animal](#) and prints out a cat specific sound.

See also

[Animal::saySomething](#)

Implements [Animal](#).

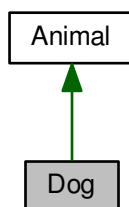
The documentation for this class was generated from the following file:

- [animal.h](#)

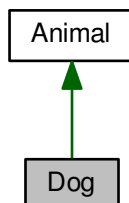
7.3 Dog Class Reference

```
#include <animal.h>
```

Inheritance diagram for Dog:



Collaboration diagram for Dog:



Public Member Functions

- [Dog](#) (const string &name)
- void [saySomething](#) () const

Additional Inherited Members

7.3.1 Detailed Description

from class [Animal](#).

Author

Arno Wilhelm

Version

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See also

[Animal](#)

7.3.2 Constructor & Destructor Documentation

7.3.2.1 Dog()

```
Dog::Dog (
    const string & name ) [inline]
```

7.3.3 Member Function Documentation

7.3.3.1 saySomething()

```
void Dog::saySomething ( ) const [inline], [virtual]
```

Implements the saySomething method of base class [Animal](#) and prints out a dog specific sound.

See also

[Animal::saySomething](#)

Implements [Animal](#).

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

- [animal.h](#)

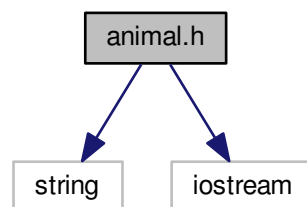
Chapter 8

File Documentation

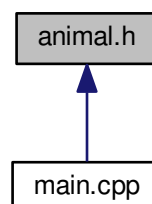
8.1 animal.h File Reference

```
#include <string>
#include <iostream>
```

Include dependency graph for animal.h:



This graph shows which files directly or indirectly include this file:



Classes

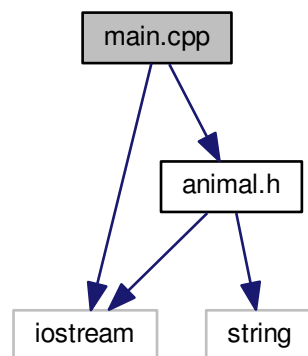
- class [Animal](#)
- class [Dog](#)
- class [Cat](#)

Namespaces

- [std](#)

8.2 main.cpp File Reference

```
#include <iostream>
#include "animal.h"
Include dependency graph for main.cpp:
```



Functions

- int [main](#) ()

8.2.1 Function Documentation

8.2.1.1 main()

```
int main ( )
```


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