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

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Chapter 2

Namespace Index

2.1 Namespace List

Here is a list of all namespaces with brief descriptions:

Chapter 3

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3.1 Class Hierarchy

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

Chapter 4

Class Index

4.1 Class List

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

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Here is a list of all files with brief descriptions:

Chapter 6

Namespace Documentation

6.1 std Namespace Reference

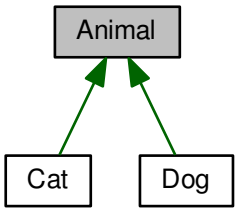
Chapter 7

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.

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7.1.2 Constructor & Destructor Documentation

7.1.2.1 Animal()

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

Constructor

Parameters

name	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]
```

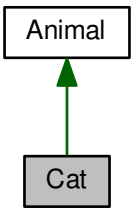
The documentation for this class was generated from the following file:

- animal.h

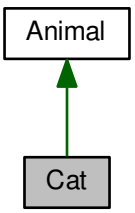
7.2 Cat Class Reference

```
#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.

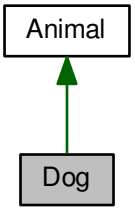
The documentation for this class was generated from the following file:

- animal.h

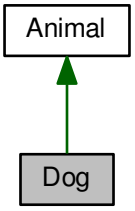
7.3 Dog Class Reference

```
#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

1.0

Since

2018-05-29

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

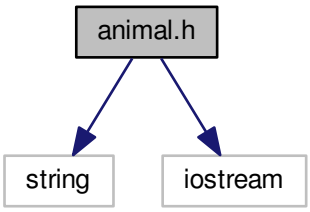
Chapter 8

File Documentation

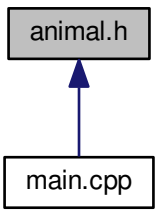
8.1 animal.h File Reference

```
#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

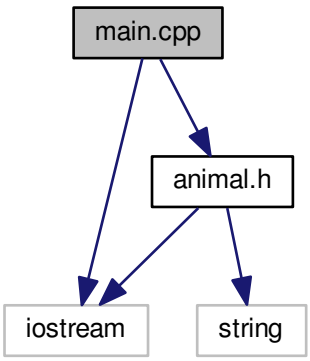
Namespaces

- 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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