

arcade

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Chapter 1

Namespace Index

1.1 Namespace List

Here is a list of all documented namespaces with brief descriptions:

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Chapter 2

Hierarchical Index

2.1 Class Hierarchy

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

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std::exception	
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Chapter 3

Class Index

3.1 Class List

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

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Arcade::Core::CoreException	
CoreException class	13
Arcade::IGame	
Game Interface	14
Arcade::IRenderer	
Graphic Interface	14
Arcade::Ncurses	
Ncurses class	15
Arcade::RuntimeException	
RuntimeException class	17
Arcade::Sdl2	
Sdl2 class	17
Arcade::Sfml	
Sfml class	19

Chapter 4

File Index

4.1 File List

Here is a list of all documented files with brief descriptions:

Core/include/Arcade/ Constants.hpp	??
Core/include/Arcade/ Core.hpp	
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Core/include/Arcade/ Enum.hpp	
File declaring Enum	22
Core/include/Arcade/ RuntimeException.hpp	
File declaring RuntimeException	23
Core/include/Arcade/abstractions/ IGame.hpp	
File declaring Game Interface	21
Core/include/Arcade/abstractions/ IRenderer.hpp	
File declaring Graphic Interface	21
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File declaring Ncurses	23
Graphics/SDL2/include/Arcade/ Sdl2.hpp	
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Chapter 5

Namespace Documentation

5.1 Arcade Namespace Reference

Main namespace for the [Arcade](#) project.

Classes

- class [IGame](#)
Game Interface.
- class [IRenderer](#)
Graphic Interface.
- class [Core](#)
Core class.
- class [RuntimeException](#)
RuntimeException class.
- class [Sdl2](#)
Sdl2 class.
- class [Ncurses](#)
Ncurses class.
- class [Sfml](#)
Sfml class.

Enumerations

- enum class **CoreMode** { **GAME** , **MENU** , **PAUSE** , **QUIT** }
- enum class **GameMode** { **GAME** , **GAME_OVER** , **MENU** , **PAUSE** , **QUIT** }
- enum class [GameEvent](#) { **UP** , **DOWN** , **LEFT** , **RIGHT** , **SHOOT** , **PAUSE** , **QUIT** , **NONE** }
Enum for the GameEvent.

5.1.1 Detailed Description

Main namespace for the [Arcade](#) project.

5.1.2 Enumeration Type Documentation

5.1.2.1 GameEvent

enum [Arcade::GameEvent](#) [strong]

Enum for the GameEvent.

Set of enum used for the game event

Chapter 6

Class Documentation

6.1 Arcade::Core Class Reference

[Core](#) class.

```
#include <Arcade/Core.hpp>
```

Classes

- class [CoreException](#)
CoreException class.

Public Member Functions

- **Core** (const [Core](#) &)=delete
- **Core & operator=** (const [Core](#) &)=delete
- void [parser](#) (const std::string &path)
parse arguments
- int [runArcade](#) (const std::string &path)
Run Arcade.
- void [gameLoop](#) ()
Game loop.
- void [handleEvents](#) (const [GameEvent](#) &event)
Handle events.
- void [setMode](#) (const CoreMode &gameMode)
Set the game mode.
- void [closeWindow](#) ()
close the window

6.1.1 Detailed Description

[Core](#) class.

[Core](#) class for the [Arcade](#) project

6.1.2 Member Function Documentation

6.1.2.1 gameLoop()

```
void Arcade::Core::gameLoop ( )
```

Game loop.

Main game loop

6.1.2.2 handleEvents()

```
void Arcade::Core::handleEvents (
    const GameEvent & event )
```

Handle events.

Parameters

<i>event</i>	
--------------	--

6.1.2.3 parser()

```
void Arcade::Core::parser (
    const std::string & path )
```

parse arguments

Parameters

<i>path</i>	
-------------	--

6.1.2.4 runArcade()

```
int Arcade::Core::runArcade (
    const std::string & path )
```

Run [Arcade](#).

Parameters

<i>path</i>	
-------------	--

Returns

int

6.1.2.5 setMode()

```
void Arcade::Core::setMode (
    const CoreMode & gameMode ) [inline]
```

Set the game mode.

Parameters

<i>gameMode</i>	
-----------------	--

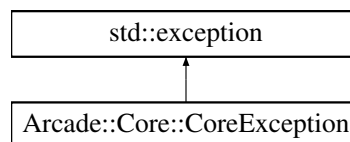
The documentation for this class was generated from the following file:

- Core/include/Arcade/[Core.hpp](#)

6.2 Arcade::Core::CoreException Class Reference[CoreException](#) class.

#include <Arcade/Core.hpp>

Inheritance diagram for Arcade::Core::CoreException:

**Public Member Functions**

- **CoreException** (std::string msg)
- **CoreException** ([CoreException](#) const &)=delete
- const char * **what** () const noexcept override

6.2.1 Detailed Description[CoreException](#) class.Exception class for the [Core](#) class

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

- Core/include/Arcade/[Core.hpp](#)

6.3 Arcade::IGame Class Reference

Game Interface.

```
#include <Arcade/abstractions/IGame.hpp>
```

Public Member Functions

- **IGame** (const [IGame](#) &)=delete
- **IGame** & **operator=** (const [IGame](#) &)=delete
- virtual void [start](#) ()=0
start the game
- virtual void [stop](#) ()=0
stop the game

6.3.1 Detailed Description

Game Interface.

Set of method to implement for the business logic of the [Arcade](#) project

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

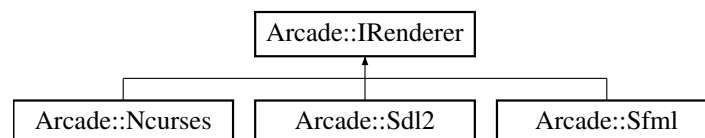
- [Core/include/Arcade/abstractions/IGame.hpp](#)

6.4 Arcade::IRenderer Class Reference

Graphic Interface.

```
#include <Arcade/abstractions/IRenderer.hpp>
```

Inheritance diagram for Arcade::IRenderer:



Public Member Functions

- **IRenderer** (const [IRenderer](#) &)=delete
- **IRenderer** & **operator=** (const [IRenderer](#) &)=delete
- virtual [GameEvent](#) [getEvent](#) ()=0
Get the event object.
- virtual void [displayWindow](#) ()=0
display actual window
- virtual void [clearWindow](#) ()=0
clear actual window
- virtual void [closeWindow](#) ()=0
close actual window
- virtual void [setTitle](#) (const std::string &title)=0
set window title
- virtual void **displayMenu** ()=0

6.4.1 Detailed Description

Graphic Interface.

Set of method to implement for the business logic of the [Arcade](#) project

6.4.2 Member Function Documentation

6.4.2.1 `getEvent()`

```
virtual GameEvent Arcade::IRenderer::getEvent ( ) [pure virtual]
```

Get the event object.

Returns

`GameEvent`

Implemented in [Arcade::Sfml](#), [Arcade::Sdl2](#), and [Arcade::Ncurses](#).

6.4.2.2 `setTitle()`

```
virtual void Arcade::IRenderer::setTitle (
    const std::string & title ) [pure virtual]
```

set window title

Parameters

<i>title</i>	
--------------	--

Implemented in [Arcade::Sfml](#), [Arcade::Sdl2](#), and [Arcade::Ncurses](#).

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

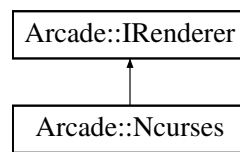
- Core/include/Arcade/abstractions/[IRenderer.hpp](#)

6.5 Arcade::Ncurses Class Reference

[Ncurses](#) class.

```
#include <Arcade/Ncurses.hpp>
```

Inheritance diagram for `Arcade::Ncurses`:



Public Member Functions

- **Ncurses** (const [Ncurses](#) &)=delete
- **Ncurses** & **operator=** (const [Ncurses](#) &)=delete
- **GameEvent** **getEvent** () override
Get the event object.
- void **displayWindow** () override
display actual window
- void **clearWindow** () override
clear actual window
- void **closeWindow** () override
close actual window
- void **setTitle** (const std::string &title) override
set window title
- void **displayMenu** () override

6.5.1 Detailed Description

[Ncurses](#) class.

[Ncurses](#) class for the [Arcade](#) project

6.5.2 Member Function Documentation

6.5.2.1 getEvent()

[GameEvent](#) `Arcade::Ncurses::getEvent ()` [override], [virtual]

Get the event object.

Returns

`GameEvent`

Implements [Arcade::IRenderer](#).

6.5.2.2 setTitle()

```
void Arcade::Ncurses::setTitle (
    const std::string & title ) [inline], [override], [virtual]
```

set window title

Parameters

<i>title</i>	
--------------	--

Implements [Arcade::IRenderer](#).

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

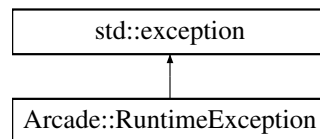
- Graphics/NCurses/include/Arcade/[Ncurses.hpp](#)

6.6 Arcade::RuntimeException Class Reference

[RuntimeException](#) class.

```
#include <Arcade/RuntimeException.hpp>
```

Inheritance diagram for Arcade::RuntimeException:



Public Member Functions

- **RuntimeException** (std::string msg)
- **RuntimeException** ([RuntimeException](#) const &)=delete
- const char * **what** () const noexcept override

6.6.1 Detailed Description

[RuntimeException](#) class.

[RuntimeException](#) class for the [Arcade](#) project

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

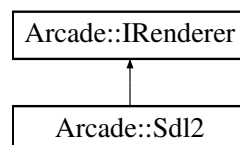
- Core/include/Arcade/[RuntimeException.hpp](#)

6.7 Arcade::Sdl2 Class Reference

[Sdl2](#) class.

```
#include <Arcade/Sdl2.hpp>
```

Inheritance diagram for Arcade::Sdl2:



Public Member Functions

- **Sdl2** (const [Sdl2](#) &)=delete
- **Sdl2 & operator=** (const [Sdl2](#) &)=delete
- **GameEvent** [getEvent](#) () override
 - Get the event object.*
- void [displayWindow](#) () override
 - display actual window*
- void [clearWindow](#) () override
 - clear actual window*
- void [closeWindow](#) () override
 - close actual window*
- void [setTitle](#) (const std::string &title) override
 - set window title*
- void **displayMenu** () override

6.7.1 Detailed Description

[Sdl2](#) class.

[Sdl2](#) class for the [Arcade](#) project

6.7.2 Member Function Documentation

6.7.2.1 [getEvent\(\)](#)

```
GameEvent Arcade::Sdl2::getEvent ( ) [override], [virtual]
```

Get the event object.

Returns

[GameEvent](#)

Implements [Arcade::IRenderer](#).

6.7.2.2 [setTitle\(\)](#)

```
void Arcade::Sdl2::setTitle (
    const std::string & title ) [inline], [override], [virtual]
```

set window title

Parameters

<i>title</i>	
--------------	--

Implements [Arcade::IRenderer](#).

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

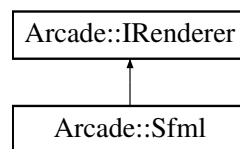
- Graphics/SDL2/include/Arcade/[Sdl2.hpp](#)

6.8 Arcade::Sfml Class Reference

[Sfml](#) class.

```
#include <Arcade/Sfml.hpp>
```

Inheritance diagram for Arcade::Sfml:



Public Member Functions

- **Sfml** (const [Sfml](#) &)=delete
- [Sfml](#) & **operator=** (const [Sfml](#) &)=delete
- [GameEvent](#) **getEvent** () override
Get the event object.
- void [displayWindow](#) () override
display actual window
- void [clearWindow](#) () override
clear actual window
- void [closeWindow](#) () override
close actual window
- void [setTitle](#) (const std::string &title) override
set window title
- void **displayMenu** () override

6.8.1 Detailed Description

[Sfml](#) class.

[Sfml](#) class for the [Arcade](#) project

6.8.2 Member Function Documentation

6.8.2.1 `getEvent()`

```
GameEvent Arcade::Sfml::getEvent ( ) [override], [virtual]
```

Get the event object.

Returns

GameEvent

Implements [Arcade::IRenderer](#).

6.8.2.2 `setTitle()`

```
void Arcade::Sfml::setTitle (
    const std::string & title ) [inline], [override], [virtual]
```

set window title

Parameters

<i>title</i>	
--------------	--

Implements [Arcade::IRenderer](#).

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

- Graphics/SFML/include/Arcade/[Sfml.hpp](#)

Chapter 7

File Documentation

7.1 Core/include/Arcade/abstractions/IGame.hpp File Reference

File declaring Game Interface.

Classes

- class [Arcade::IGame](#)
Game Interface.

Namespaces

- [Arcade](#)
Main namespace for the [Arcade](#) project.

7.1.1 Detailed Description

File declaring Game Interface.

7.2 Core/include/Arcade/abstractions/IRenderer.hpp File Reference

File declaring Graphic Interface.

```
#include <string>
#include "Arcade/Enum.hpp"
```

Classes

- class [Arcade::IRenderer](#)
Graphic Interface.

Namespaces

- [Arcade](#)

Main namespace for the [Arcade](#) project.

7.2.1 Detailed Description

File declaring Graphic Interface.

7.3 Core/include/Arcade/Core.hpp File Reference

File declaring Core.

```
#include <iostream>
#include <exception>
#include <memory>
#include "Arcade/Enum.hpp"
#include "Arcade/abstractions/IRenderer.hpp"
```

Classes

- class [Arcade::Core](#)
[Core](#) class.
- class [Arcade::Core::CoreException](#)
[CoreException](#) class.

Namespaces

- [Arcade](#)

Main namespace for the [Arcade](#) project.

7.3.1 Detailed Description

File declaring Core.

7.4 Core/include/Arcade/Enum.hpp File Reference

File declaring Enum.

Namespaces

- [Arcade](#)

Main namespace for the [Arcade](#) project.

Enumerations

- enum class **CoreMode** { **GAME** , **MENU** , **PAUSE** , **QUIT** }
- enum class **GameMode** { **GAME** , **GAME_OVER** , **MENU** , **PAUSE** , **QUIT** }
- enum class [Arcade::GameEvent](#) { **UP** , **DOWN** , **LEFT** , **RIGHT** , **SHOOT** , **PAUSE** , **QUIT** , **NONE** }

Enum for the GameEvent.

7.4.1 Detailed Description

File declaring Enum.

Set of enum used in the [Arcade](#) project

7.5 Core/include/Arcade/RuntimeException.hpp File Reference

File declaring RuntimeException.

```
#include <iostream>
#include <exception>
```

Classes

- class [Arcade::RuntimeException](#)
RuntimeException class.

Namespaces

- [Arcade](#)
Main namespace for the [Arcade](#) project.

7.5.1 Detailed Description

File declaring RuntimeException.

7.6 Graphics/NCurses/include/Arcade/Ncurses.hpp File Reference

File declaring Ncurses.

```
#include <ncurses.h>
#include <string_view>
#include "Arcade/abstractions/IRenderer.hpp"
```

Classes

- class [Arcade::Ncurses](#)
Ncurses class.

Namespaces

- [Arcade](#)
Main namespace for the [Arcade](#) project.

7.6.1 Detailed Description

File declaring Ncurses.

7.7 Graphics/SDL2/include/Arcade/Sdl2.hpp File Reference

File declaring Sdl2 class.

```
#include <iostream>
#include <SDL2/SDL.h>
#include "Arcade/abstractions/IRenderer.hpp"
```

Classes

- class [Arcade::Sdl2](#)
Sdl2 class.

Namespaces

- [Arcade](#)
Main namespace for the [Arcade](#) project.

Variables

- constexpr std::string_view **WINDOW_TITLE** = "Arcade - SDL2"

7.7.1 Detailed Description

File declaring Sdl2 class.

7.8 Graphics/SFML/include/Arcade/Sfml.hpp File Reference

File declaring Sfml class.

```
#include <SFML/Graphics.hpp>
#include "Arcade/abstractions/IRenderer.hpp"
```

Classes

- class [Arcade::Sfml](#)
Sfml class.

Namespaces

- [Arcade](#)
Main namespace for the [Arcade](#) project.

Variables

- constexpr std::string_view **WINDOW_TITLE** = "Arcade - SFML"

7.8.1 Detailed Description

File declaring Sfml class.

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- handleEvents
 - Arcade::Core, [12](#)
- parser
 - Arcade::Core, [12](#)
- runArcade
 - Arcade::Core, [12](#)
- setMode
 - Arcade::Core, [13](#)
- setTitle
 - Arcade::IRenderer, [15](#)
 - Arcade::Ncurses, [16](#)
 - Arcade::Sdl2, [18](#)
 - Arcade::Sfml, [20](#)