

arcade

0.1.0

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# Chapter 1

## Namespace Index

### 1.1 Namespace List

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

<a href="#">Arcade</a>	Main namespace for the <a href="#">Arcade</a> project . . . . .	9
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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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Arcade::Core::CoreException . . . . .	13
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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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## Chapter 4

# File Index

### 4.1 File List

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

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File declaring RuntimeException . . . . .	23
Core/include/Arcade/abstractions/ <a href="#">IGame.hpp</a>	
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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>	
-----------------	--

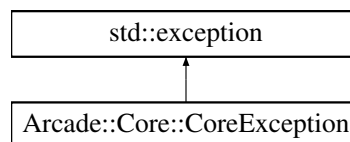
The documentation for this class was generated from the following file:

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

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

#include &lt;Arcade/Core.hpp&gt;

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:

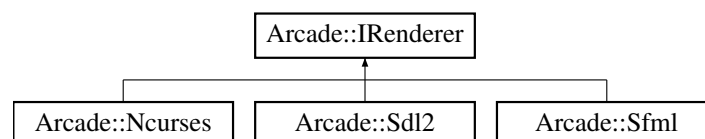
- Core/include/Arcade/abstractions/[IGame.hpp](#)

## 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*

### 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:

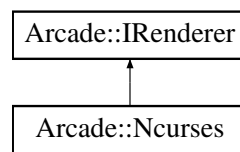
- Core/include/Arcade/abstractions/[IRenderer.hpp](#)

## 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*

### 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:

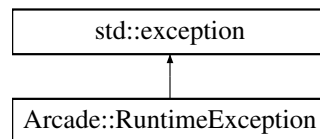
- Graphics/NCurses/include/Arcade/[Ncurses.hpp](#)

## 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:

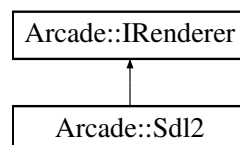
- Core/include/Arcade/[RuntimeException.hpp](#)

## 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*

### 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::!Renderer](#).

#### 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:

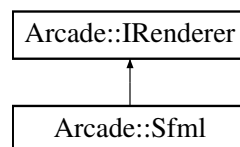
- Graphics/SDL2/include/Arcade/[Sdl2.hpp](#)

## 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*

### 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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