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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Main namespace for the Arcade project 9

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

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

Arcade::Core 11
std::exception
  Arcade::Core::CoreException 12
  Arcade::RuntimeException 15
Arcade::IGame 13
Arcade::IRenderer 13
  Arcade::Ncurses 14
  Arcade::Sdl2 16
  Arcade::Sfml 17

Chapter 3

Class Index

3.1 Class List

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

Arcade::Core
    Core class 11
Arcade::Core::CoreException
    CoreException class 12
Arcade::IGame
    Game Interface 13
Arcade::IRenderer
    Graphic Interface 13
Arcade::Ncurses
    Ncurses class 14
Arcade::RuntimeException
    RuntimeException class 15
Arcade::Sdl2
    Sdl2 class 16
Arcade::Sfml
    Sfml class 17

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File Index

4.1 File List

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

Core/include/**Constants.hpp** . . . . . **??**
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Core/include/Enum.hpp
File declaring Enum 20
Core/include/RuntimeException.hpp
File declaring RuntimeException 21
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Graphics/SDL2/include/Sdl2.hpp
File declaring Sdl2 class 22
Graphics/SFML/include/Sfml.hpp
File declaring Sfml class 23

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 <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)
- int **runArcade** (const std::string &path)
- void gameLoop ()

  Game loop.
- void **handleEvents** (const GameEvent &event)
- void setMode (const CoreMode &gameMode)

  Set the mode object.
- void **closeWindow** ()

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 setMode()

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

Set the mode object.

Parameters

gameMode	

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

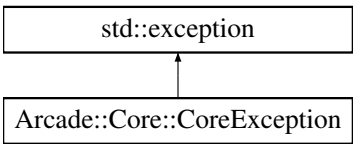
- Core/include/Core.hpp

6.2 Arcade::Core::CoreException Class Reference

CoreException class.

`#include <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/Core.hpp

6.3 Arcade::IGame Class Reference

Game Interface.

`#include <abstractions/IGame.hpp>`

Public Member Functions

- **IGame** (const IGame &)=delete
- IGame & **operator=** (const IGame &)=delete

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:

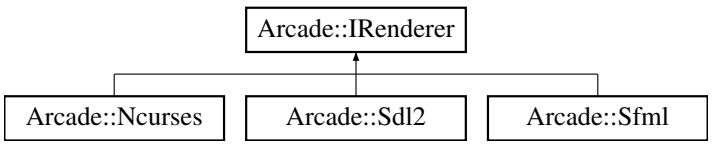
- Core/include/abstractions/IGame.hpp

6.4 Arcade::IRenderer Class Reference

Graphic Interface.

`#include <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

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.

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

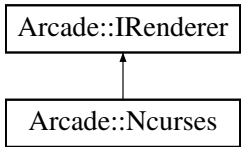
- Core/include/abstractions/IRenderer.hpp

6.5 Arcade::Ncurses Class Reference

Ncurses class.

```
#include <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

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.

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

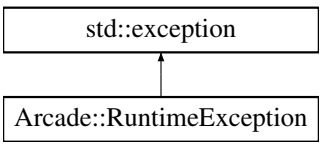
- Graphics/NCurses/include/Ncurses.hpp

6.6 Arcade::RuntimeException Class Reference

RuntimeException class.

```
#include <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:

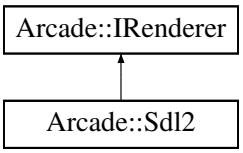
- Core/include/RuntimeException.hpp

6.7 Arcade::Sdl2 Class Reference

Sdl2 class.

`#include <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

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.

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

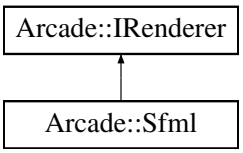
- Graphics/SDL2/include/Sdl2.hpp

6.8 Arcade::Sfml Class Reference

Sfml class.

```
#include <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

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.

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

- Graphics/SFML/include/Sfml.hpp

Chapter 7

File Documentation

7.1 Core/include/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/abstractions/IRenderer.hpp File Reference

File declaring Graphic Interface.

```
#include "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/Core.hpp File Reference

File declaring Core.

```
#include <iostream>
#include <exception>
#include <memory>
#include "Enum.hpp"
#include "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/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/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/Ncurses.hpp File Reference

File declaring Ncurses.

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

Classes

- class Arcade::Ncurses

  Ncurses class.

Namespaces

- Arcade

  Main namespace for the Arcade project.

Variables

- constexpr std::string_view **WINDOW_TITLE** = "Arcade - NCurses\n"

7.6.1 Detailed Description

File declaring Ncurses.

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

File declaring Sdl2 class.

```
#include <iostream>
#include <SDL2/SDL.h>
#include "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/Sfml.hpp File Reference

File declaring Sfml class.

```
#include <SFML/Graphics.hpp>
#include "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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