Arcade

Chapter 1

Arcade

Arcade is a project that consists in recreating an arcade terminal that can be managed by several graphic libraries

1.1 How does it work?

Concerning the functioning of this project, we have imagined a common architecture that will allow us to manage several graphic libraries at the same time. This allows us to change game at any time and also graphic library.

1.2 Getting Started

1.2.1 Installation

- `sdl2`

- `sfml`

- `ncurses`

1.2.2 Quickstart

First compile the code
```
make
```

then you can run the projet by choose one graphical library at the beginning:
```
./arcade lib/arcade_ncurses.so
```

1.2.3 Usage

Once you are in game, first you going to be in the menu and you will be able to choose one game and one graphical library to run first.

Here's the keys to play:

- Left arrow : Go left.

- Right arrow : Go right.

- Up arrow : Go up.

- Down arrow : Go down.

- G : Previous graphical library.

- H : Next graphical library.

- B : Previous game.

- N : Next game.

- R : Restart the game.

- M : Go to menu (in game).

- Escape : Quit arcade

1.3 Our team

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Chapter 2

Hierarchical Index

2.1 Class Hierarchy

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

Chapter 3

Class Index

3.1 Class List

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

Chapter 4

Class Documentation

4.1 arcade::SDLDisplay::Colors Struct Reference

Public Attributes

- SDL_Color **red** = { 255, 0, 0, 255 }
- SDL_Color **blue** = { 0, 0, 255, 255 }
- SDL_Color **green** = { 0, 255, 0, 255 }
- SDL_Color **dark** = { 100, 100, 100, 255 }
- SDL_Color **yellow** = { 255, 255, 0, 255 }
- SDL_Color **white** = { 255, 255, 255, 255 }

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

- src/Graphics/SDL/includes/SDLDisplay.hpp

4.2 arcade::Core Class Reference

Collaboration diagram for arcade::Core:

Public Member Functions

- **Core** (int ac, char ∗argv[ ])
- void **run** ()

Protected Attributes

- DLLoader< arcade::IGames > **game_lib**
- DLLoader< arcade::IGraphics > **graphic_lib**
- std::vector< std::string > **games_lib**
- std::vector< std::string > **graphics_libs**
- int **current_game** = 0
- int **current_graphics** = 0
- bool **isMenu** = true

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

- src/Core/includes/Core.hpp
- src/Core/src/Core.cpp

4.3 DLLoader< T > Class Template Reference

Public Member Functions

- T ∗ **getInstance** ()
- void **setInstance** (std::string nameLib)
- void **unload** ()

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

- includes/DLLoader.hpp

4.4 Error Class Reference

Inheritance diagram for Error:

4.5 ErrorHandling Class Reference

Inheritance diagram for ErrorHandling:

Collaboration diagram for ErrorHandling:

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

- src/Core/includes/ErrorHandling.hpp

4.6 arcade::IGames Class Reference

Inheritance diagram for arcade::IGames:

Public Member Functions

- virtual arcade::Input event (arcade::Input input)=0

  catch the event related to the game
- virtual std::vector< std::shared_ptr< arcade::IObject > > loop (arcade::Input input)=0

  Loop the game.
- virtual void restart ()=0

  Restart the entire game or the current loaded game.
- virtual std::shared_ptr< arcade::ITile > createTile ()=0

  Create a squared object to display.
- virtual std::shared_ptr< arcade::ISound > createSound ()=0

  Create a sound object to display.
- virtual std::shared_ptr< arcade::IText > createText ()=0

  Create a text object to display.

4.6.1 Member Function Documentation

4.6.1.1 createSound()

```
virtual std::shared_ptr<arcade::ISound> arcade::IGames::createSound ( )  [pure virtual]
```

Create a sound object to display.

Returns

std::shared_ptr<arcade::ISound> a pointer to the sound object

Implemented in arcade::Menu, arcade::Nibbler, arcade::Snake, and arcade::Pacman.

4.6.1.2 createText()

```
virtual std::shared_ptr<arcade::IText> arcade::IGames::createText ( )  [pure virtual]
```

Create a text object to display.

Returns

std::shared_ptr<arcade::IText> a pointer to the text object

Implemented in arcade::Menu, arcade::Nibbler, arcade::Snake, and arcade::Pacman.

4.6.1.3 createTile()

```
virtual std::shared_ptr<arcade::ITile> arcade::IGames::createTile ( )  [pure virtual]
```

Create a squared object to display.

Returns

std::shared_ptr<arcade::ITile> a pointer to the tile object

Implemented in arcade::Menu, arcade::Nibbler, arcade::Snake, and arcade::Pacman.

4.6.1.4 event()

```
virtual arcade::Input arcade::IGames::event (
            arcade::Input input ) [pure virtual]
```

catch the event related to the game

@params arcade::Input

Returns

arcade::Input

Implemented in arcade::Menu, arcade::Nibbler, arcade::Snake, and arcade::Pacman.

4.6.1.5 loop()

```
virtual std::vector<std::shared_ptr<arcade::IObject> > arcade::IGames::loop (
            arcade::Input input ) [pure virtual]
```

Loop the game.

Returns

std::vector<std::shared_ptr<IObject>> to be draw in the current graphical display

Implemented in arcade::Menu, arcade::Nibbler, arcade::Snake, and arcade::Pacman.

4.6.1.6 restart()

```
virtual void arcade::IGames::restart ( ) [pure virtual]
```

Restart the entire game or the current loaded game.

Returns

void

Implemented in arcade::Menu, arcade::Nibbler, arcade::Snake, and arcade::Pacman.

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

- includes/IGames.hpp

4.7 arcade::IGraphics Class Reference

Inheritance diagram for arcade::IGraphics:

Public Member Functions

- virtual void display ()=0

  Enumerate the possible actions in the arcarde box.
- virtual void clear ()=0

  Clear current loaded library window from its drawn elements.
- virtual void draw (std::shared_ptr< arcade::IObject > object)=0

  Draw object on the scene from the current @params arcade::IObject to be draw in the current graphic library.
- virtual arcade::Input event ()=0

  Handle events from the current loaded graphic library.

4.7.1 Member Function Documentation

4.7.1.1 clear()

```
virtual void arcade::IGraphics::clear ( )  [pure virtual]
```

Clear current loaded library window from its drawn elements.

Returns

void

Implemented in arcade::SFMLDisplay, arcade::SDLDisplay, and arcade::NCursesDisplay.

4.7.1.2 display()

```
virtual void arcade::IGraphics::display ( )  [pure virtual]
```

Enumerate the possible actions in the arcarde box.

Display elements from the current loaded graphic library

Returns

void

Implemented in arcade::SFMLDisplay, arcade::SDLDisplay, and arcade::NCursesDisplay.

4.7.1.3 draw()

```
virtual void arcade::IGraphics::draw (
             std::shared_ptr< arcade::IObject > object )  [pure virtual]
```

Draw object on the scene from the current @params arcade::IObject to be draw in the current graphic library.

Returns

> void

Implemented in arcade::SFMLDisplay, arcade::SDLDisplay, and arcade::NCursesDisplay.

4.7.1.4 event()

```
virtual arcade::Input arcade::IGraphics::event ( )  [pure virtual]
```

Handle events from the current loaded graphic library.

Returns

> arcade::Input corresponds to the last events from the loaded graphic library

Implemented in arcade::SFMLDisplay, arcade::SDLDisplay, and arcade::NCursesDisplay.

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

- includes/IGraphics.hpp

4.8   arcade::IObject Class Reference

virtual class for all objects in the arcade box

```
#include <IObject.hpp>
```

Inheritance diagram for arcade::IObject:

4.8.1   Detailed Description

virtual class for all objects in the arcade box

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

- includes/IObject.hpp

4.9 arcade::ISound Class Reference

Inheritance diagram for arcade::ISound:

Collaboration diagram for arcade::ISound:

Public Member Functions

- virtual std::string getSoundPath () const =0

  Get the sound path.
- virtual float getVolume () const =0

  Get the volume of the sound.
- virtual void setSoundPath (std::string path)=0

  Set the sound path.
- virtual void setVolume (float volume)=0

  Set the volume of the sound.
- virtual void pauseSound ()=0

  Pause the sound.
- virtual void playSound ()=0

  Start or resume the sound.
- virtual void stopSound ()=0

  Stop the sound and reset it (unlike pauseSound())

4.9.1 Member Function Documentation

4.9.1.1 getSoundPath()

```
virtual std::string arcade::ISound::getSoundPath ( ) const  [pure virtual]
```

Get the sound path.

Returns

std::string

Implemented in arcade::Sound.

4.9.1.2 getVolume()

```
virtual float arcade::ISound::getVolume ( ) const  [pure virtual]
```

Get the volume of the sound.

Returns

float

Implemented in arcade::Sound.

4.9.1.3 pauseSound()

```
virtual void arcade::ISound::pauseSound ( )  [pure virtual]
```

Pause the sound.

Returns

void

Implemented in arcade::Sound.

4.9.1.4 playSound()

```
virtual void arcade::ISound::playSound ( )  [pure virtual]
```

Start or resume the sound.

Returns

void

Implemented in arcade::Sound.

4.9.1.5 setSoundPath()

```
virtual void arcade::ISound::setSoundPath (
            std::string path )  [pure virtual]
```

Set the sound path.

@params std::string

Returns

void

Implemented in arcade::Sound.

4.9.1.6 setVolume()

```
virtual void arcade::ISound::setVolume (
            float volume )  [pure virtual]
```

Set the volume of the sound.

@params float

Returns

void

Implemented in arcade::Sound.

4.9.1.7 stopSound()

```
virtual void arcade::ISound::stopSound ( )  [pure virtual]
```

Stop the sound and reset it (unlike pauseSound())

Returns

void

Implemented in arcade::Sound.

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

- includes/IObject.hpp

4.10 arcade::IText Class Reference

Inheritance diagram for arcade::IText:

Collaboration diagram for arcade::IText:

Public Member Functions

- virtual std::string getText () const =0

    Get the text.
- virtual arcade::Color getColorText () const =0

    Get the color of text.
- virtual std::pair< std::size_t, std::size_t > getPosition () const =0

    Get the position of text.
- virtual void setText (std::string text)=0

    Set the text.
- virtual void setColorText (arcade::Color)=0

    Set the color of the text.
- virtual void setPosition (std::pair< std::size_t, std::size_t >)=0

    Set the position of the text.
- virtual void setRotation (float rotation)=0

    Set the rotation of the object.
- virtual std::pair< float, float > getOriginScale ()=0

    Get the origin value of the scale.
- virtual std::pair< std::size_t, std::size_t > getOriginPosition ()=0

    Get the origin value of the position.
- virtual void setOriginScale (std::pair< float, float > scale)=0

    Set the origin value of the scale.
- virtual void setOriginPosition (std::pair< std::size_t, std::size_t > position)=0

    Set the origin value of the position.
- virtual void setEvent (arcade::Input event)=0

    Set the event that the tile must trigger.
- virtual arcade::Input getEvent () const =0

    Get the event that the tile must trigger.
- virtual std::pair< float, float > getScale () const =0

    Get the scale of the object.
- virtual void setScale (std::pair< float, float > scale)=0

    Set the scale of the object.

4.10.1 Member Function Documentation

4.10.1.1 getColorText()

```
virtual arcade::Color arcade::IText::getColorText ( ) const  [pure virtual]
```

Get the color of text.

Returns

arcade::Color

Implemented in arcade::Text.

4.10.1.2 getEvent()

```
virtual arcade::Input arcade::IText::getEvent ( ) const  [pure virtual]
```

Get the event that the tile must trigger.

@params

Returns

arcade::Input

Implemented in arcade::Text.

4.10.1.3 getOriginPosition()

```
virtual std::pair<std::size_t, std::size_t> arcade::IText::getOriginPosition ( )  [pure virtual]
```

Get the origin value of the position.

@params

@returnstd::pair<std::size_t, std::size_t>

Implemented in arcade::Text.

4.10.1.4 getOriginScale()

```
virtual std::pair<float, float> arcade::IText::getOriginScale ( )  [pure virtual]
```

Get the origin value of the scale.

@params

Returns

std::pair<float, float>

Implemented in arcade::Text.

4.10.1.5 getPosition()

```
virtual std::pair<std::size_t, std::size_t> arcade::IText::getPosition ( ) const  [pure virtual]
```

Get the position of text.

Returns

std::pair<std::size_t, std::size_t>

Implemented in arcade::Text.

4.10.1.6 getScale()

```
virtual std::pair<float, float> arcade::IText::getScale ( ) const  [pure virtual]
```

Get the scale of the object.

Returns

std::pair<float, float>

Implemented in arcade::Text.

4.10.1.7 getText()

```
virtual std::string arcade::IText::getText ( ) const  [pure virtual]
```

Get the text.

Returns

std::string

Implemented in arcade::Text.

4.10.1.8 setColorText()

```
virtual void arcade::IText::setColorText (
            arcade::Color  ) [pure virtual]
```

Set the color of the text.

@params arcade::Color

Returns

void

Implemented in arcade::Text.

4.10.1.9 setEvent()

```
virtual void arcade::IText::setEvent (
            arcade::Input event )  [pure virtual]
```

Set the event that the tile must trigger.

@params

Returns

arcade::Input

Implemented in arcade::Text.

4.10.1.10 setOriginPosition()

```
virtual void arcade::IText::setOriginPosition (
            std::pair< std::size_t, std::size_t > position )  [pure virtual]
```

Set the origin value of the position.

@params

Returns

std::pair<std::size_t, std::size_t>

Implemented in arcade::Text.

4.10.1.11 setOriginScale()

```
virtual void arcade::IText::setOriginScale (
            std::pair< float, float > scale )  [pure virtual]
```

Set the origin value of the scale.

@params

Returns

std::pair<float, float>

Implemented in arcade::Text.

4.10.1.12 setPosition()

```
virtual void arcade::IText::setPosition (
            std::pair< std::size_t, std::size_t >  )  [pure virtual]
```

Set the position of the text.

@params std::pair<std::size_t, std::size_t>

Returns

void

Implemented in arcade::Text.

4.10.1.13 setRotation()

```
virtual void arcade::IText::setRotation (
            float rotation )  [pure virtual]
```

Set the rotation of the object.

@params float

Returns

void

Implemented in arcade::Text.

4.10.1.14 setScale()

```
virtual void arcade::IText::setScale (
            std::pair< float, float > scale )  [pure virtual]
```

Set the scale of the object.

@params std::pair<std::size_t, std::size_t>

Returns

void

Implemented in arcade::Text.

4.10.1.15 setText()

```
virtual void arcade::IText::setText (
            std::string text )  [pure virtual]
```

Set the text.

@params std::string

Returns

void

Implemented in arcade::Text.

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

- includes/IObject.hpp

4.11 arcade::ITile Class Reference

virtual class for all Tile in the arcade box

```
#include <IObject.hpp>
```

Inheritance diagram for arcade::ITile:

Collaboration diagram for arcade::ITile:

Public Member Functions

- virtual std::string getTexture () const =0

    Get the path for texture of the object for SFML & SDL Library.
- virtual std::pair< std::size_t, std::size_t > getPosition () const =0

    Get the Position x y of the object.
- virtual char getCharacter () const =0

    Get the characters to display for the NCurses library.
- virtual arcade::Color getColor () const =0

    Get the color of the object.
- virtual std::pair< float, float > getScale () const =0

    Get the scale of the object.
- virtual float getRotation () const =0

    Get the rotation of the object.
- virtual void setTexture (std::string path)=0

    Set the path for texture of the object for SFML & SDL Library.
- virtual void setPosition (std::pair< std::size_t, std::size_t > position)=0

    Set the position of the object.
- virtual void setCharacter (char c)=0

    Set the character of the object for NCurses library.
- virtual void setColor (arcade::Color color)=0

Set the color of the object.

- virtual void setScale (std::pair< float, float > position)=0

  Set the scale of the object.

- virtual void setRotation (float rotation)=0

  Set the rotation of the object.

- virtual std::pair< float, float > getOriginScale ()=0

  Get the origin value of the scale.

- virtual std::pair< std::size_t, std::size_t > getOriginPosition ()=0

  Get the origin value of the position.

- virtual void setOriginScale (std::pair< float, float > scale)=0

  Set the origin value of the scale.

- virtual void setOriginPosition (std::pair< std::size_t, std::size_t > position)=0

  Set the origin value of the position.

- virtual void setEvent (arcade::Input event)=0

  Set the event that the tile must trigger.

- virtual arcade::Input getEvent () const =0

  Get the event that the tile must trigger.

- virtual void setName (std::string name)=0

  Set the an unique name to a tile.

- virtual std::string getName () const =0

  Get the the unique name of the tile.

4.11.1 Detailed Description

virtual class for all Tile in the arcade box

4.11.2 Member Function Documentation

4.11.2.1 getCharacter()

```
virtual char arcade::ITile::getCharacter ( ) const  [pure virtual]
```

Get the characters to display for the NCurses library.

Returns

char

Implemented in arcade::Tile.

4.11.2.2 getColor()

```
virtual arcade::Color arcade::ITile::getColor ( ) const  [pure virtual]
```

Get the color of the object.

Returns

arcade::Color

Implemented in arcade::Tile.

4.11.2.3 getEvent()

```
virtual arcade::Input arcade::ITile::getEvent ( ) const  [pure virtual]
```

Get the event that the tile must trigger.

@params

Returns

arcade::Input

Implemented in arcade::Tile.

4.11.2.4 getName()

```
virtual std::string arcade::ITile::getName ( ) const  [pure virtual]
```

Get the the unique name of the tile.

@params

Returns

std::string

Implemented in arcade::Tile.

4.11.2.5 getOriginPosition()

```
virtual std::pair<std::size_t, std::size_t> arcade::ITile::getOriginPosition ( )  [pure virtual]
```

Get the origin value of the position.

@params

@returnstd::pair<std::size_t, std::size_t>

Implemented in arcade::Tile.

4.11.2.6 getOriginScale()

```
virtual std::pair<float, float> arcade::ITile::getOriginScale ( )  [pure virtual]
```

Get the origin value of the scale.

@params

Returns

std::pair<float, float>

Implemented in arcade::Tile.

4.11.2.7 getPosition()

```
virtual std::pair<std::size_t, std::size_t> arcade::ITile::getPosition ( ) const  [pure virtual]
```

Get the Position x y of the object.

Returns

std::pair<std::size_t, std::size_t>

Implemented in arcade::Tile.

4.11.2.8 getRotation()

```
virtual float arcade::ITile::getRotation ( ) const  [pure virtual]
```

Get the rotation of the object.

Returns

float

Implemented in arcade::Tile.

4.11.2.9 getScale()

```
virtual std::pair<float, float> arcade::ITile::getScale ( ) const  [pure virtual]
```

Get the scale of the object.

Returns

std::pair<float, float>

Implemented in arcade::Tile.

4.11.2.10 getTexture()

```
virtual std::string arcade::ITile::getTexture ( ) const  [pure virtual]
```

Get the path for texture of the object for SFML & SDL Library.

Returns

std::string

Implemented in arcade::Tile.

4.11.2.11 setCharacter()

```
virtual void arcade::ITile::setCharacter (
            char c )  [pure virtual]
```

Set the character of the object for NCurses library.

@params char

Returns

void

Implemented in arcade::Tile.

4.11.2.12 setColor()

```
virtual void arcade::ITile::setColor (
            arcade::Color color ) [pure virtual]
```

Set the color of the object.

@params arcade::Color

Returns

void

Implemented in arcade::Tile.

4.11.2.13 setEvent()

```
virtual void arcade::ITile::setEvent (
            arcade::Input event ) [pure virtual]
```

Set the event that the tile must trigger.

@params

Returns

arcade::Input

Implemented in arcade::Tile.

4.11.2.14 setName()

```
virtual void arcade::ITile::setName (
            std::string name ) [pure virtual]
```

Set the an unique name to a tile.

@params std::string

Returns

Implemented in arcade::Tile.

4.11.2.15 setOriginPosition()

```
virtual void arcade::ITile::setOriginPosition (
            std::pair< std::size_t, std::size_t > position )  [pure virtual]
```

Set the origin value of the position.

@params

Returns

std::pair<std::size_t, std::size_t>

Implemented in arcade::Tile.

4.11.2.16 setOriginScale()

```
virtual void arcade::ITile::setOriginScale (
            std::pair< float, float > scale )  [pure virtual]
```

Set the origin value of the scale.

@params

Returns

std::pair<float, float>

Implemented in arcade::Tile.

4.11.2.17 setPosition()

```
virtual void arcade::ITile::setPosition (
            std::pair< std::size_t, std::size_t > position )  [pure virtual]
```

Set the position of the object.

@params std::pair<std::size_t, std::size_t>

Returns

void

Implemented in arcade::Tile.

4.11.2.18 setRotation()

```
virtual void arcade::ITile::setRotation (
            float rotation ) [pure virtual]
```

Set the rotation of the object.

@params float

Returns

void

Implemented in arcade::Tile.

4.11.2.19 setScale()

```
virtual void arcade::ITile::setScale (
            std::pair< float, float > position ) [pure virtual]
```

Set the scale of the object.

@params std::pair<std::size_t, std::size_t>

Returns

void

Implemented in arcade::Tile.

4.11.2.20 setTexture()

```
virtual void arcade::ITile::setTexture (
            std::string path ) [pure virtual]
```

Set the path for texture of the object for SFML & SDL Library.

@params std::string

Returns

void

Implemented in arcade::Tile.

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

- includes/IObject.hpp

4.12   arcade::Menu Class Reference

Inheritance diagram for arcade::Menu:

Collaboration diagram for arcade::Menu:

Public Types

- enum **GameState** { **SNAKE**, **PACMAN**, **NIBBLER** }
- enum **LibState** { **SFML**, **SDL**, **NCURSE** }

Public Member Functions

- std::vector< std::shared_ptr< arcade::IObject > > loop (arcade::Input input)

    Loop the game.
- void restart ()

    Restart the entire game or the current loaded game.
- std::shared_ptr< arcade::ITile > createTile ()

    Create a squared object to display.
- std::shared_ptr< arcade::ISound > createSound ()

    Create a sound object to display.
- std::shared_ptr< arcade::IText > createText ()

    Create a text object to display.
- void **setText** (std::pair< std::size_t, std::size_t > pos, std::string txt)
- void **selectedGameAndLib** (std::shared_ptr< arcade::IText > text)
- void **chooseGameAndLib** (arcade::Input input)
- void **currentCursorColor** (std::shared_ptr< arcade::IText > text)
- void **sendGameAndLib** ()
- arcade::Input event (arcade::Input input)

    catch the event related to the game
- void **readPseudo** ()

4.12.1   Member Function Documentation

4.12.1.1   createSound()

```
std::shared_ptr< arcade::ISound > arcade::Menu::createSound ( )  [virtual]
```

Create a sound object to display.

Returns

    std::shared_ptr<arcade::ISound> a pointer to the sound object

Implements arcade::IGames.

4.12.1.2 createText()

```
std::shared_ptr< arcade::IText > arcade::Menu::createText ( ) [virtual]
```

Create a text object to display.

Returns

std::shared_ptr<arcade::IText> a pointer to the text object

Implements arcade::IGames.

4.12.1.3 createTile()

```
std::shared_ptr< arcade::ITile > arcade::Menu::createTile ( ) [virtual]
```

Create a squared object to display.

Returns

std::shared_ptr<arcade::ITile> a pointer to the tile object

Implements arcade::IGames.

4.12.1.4 event()

```
arcade::Input arcade::Menu::event (
            arcade::Input input ) [virtual]
```

catch the event related to the game

@params arcade::Input

Returns

arcade::Input

Implements arcade::IGames.

4.12.1.5 loop()

```
std::vector< std::shared_ptr< arcade::IObject > > arcade::Menu::loop (
            arcade::Input input ) [virtual]
```

Loop the game.

Returns

std::vector<std::shared_ptr<IObject>> to be draw in the current graphical display

Implements arcade::IGames.

4.12.1.6 restart()

```
void arcade::Menu::restart ( ) [virtual]
```

Restart the entire game or the current loaded game.

Returns

void

Implements arcade::IGames.

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

- src/Games/Menu/includes/Menu.hpp
- src/Games/Menu/src/Menu.cpp

4.13 arcade::NCursesDisplay Class Reference

Inheritance diagram for arcade::NCursesDisplay:

Collaboration diagram for arcade::NCursesDisplay:

Public Member Functions

- void display ()

    Enumerate the possible actions in the arcarde box.
- void clear ()

    Clear current loaded library window from its drawed elements.
- void draw (std::shared_ptr< arcade::IObject > object)

    Draw object on the scene from the current @params arcade::IObject to be draw in the current graphic library.
- arcade::Input event ()

    Handle events from the current loaded graphic library.
- void **whichColorTile** (arcade::Color color)
- void **whichColorText** (arcade::Color color)

4.13.1 Member Function Documentation

4.13.1.1 clear()

```
void arcade::NCursesDisplay::clear ( )  [virtual]
```

Clear current loaded library window from its drawed elements.

Returns

void

Implements arcade::IGraphics.

4.13.1.2 display()

```
void arcade::NCursesDisplay::display ( )  [virtual]
```

Enumerate the possible actions in the arcarde box.

Display elements from the current loaded graphic library

Returns

void

Implements arcade::IGraphics.

4.13.1.3 draw()

```
void arcade::NCursesDisplay::draw (
            std::shared_ptr< arcade::IObject > object )  [virtual]
```

Draw object on the scene from the current @params arcade::IObject to be draw in the current graphic library.

Returns

void

Implements arcade::IGraphics.

4.13.1.4 event()

```
arcade::Input arcade::NCursesDisplay::event ( ) [virtual]
```

Handle events from the current loaded graphic library.

Returns

arcade::Input corresponds to the last events from the loaded graphic library

Implements arcade::IGraphics.

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

- src/Graphics/NCurses/includes/NCursesDisplay.hpp
- src/Graphics/NCurses/src/NCursesDisplay.cpp

4.14 arcade::Nibbler Class Reference

Inheritance diagram for arcade::Nibbler:

Collaboration diagram for arcade::Nibbler:

Classes

- class SnakeGame

Public Types

- enum **Direction** { **UP**, **DOWN**, **LEFT**, **RIGHT** }

Public Member Functions

- std::vector< std::shared_ptr< arcade::IObject > > loop (arcade::Input input)

  Loop the game.
- void restart ()

  Restart the entire game or the current loaded game.
- std::shared_ptr< arcade::ITile > createTile ()

  Create a squared object to display.
- std::shared_ptr< arcade::ISound > createSound ()

  Create a sound object to display.
- std::shared_ptr< arcade::IText > createText ()

  Create a text object to display.
- arcade::Input event (arcade::Input input)

  catch the event related to the game

4.14.1 Member Function Documentation

4.14.1.1 createSound()

```
std::shared_ptr<arcade::ISound> arcade::Nibbler::createSound ( ) [inline], [virtual]
```

Create a sound object to display.

Returns

std::shared_ptr<arcade::ISound> a pointer to the sound object

Implements arcade::IGames.

4.14.1.2 createText()

```
std::shared_ptr< arcade::IText > arcade::Nibbler::createText ( ) [virtual]
```

Create a text object to display.

Returns

std::shared_ptr<arcade::IText> a pointer to the text object

Implements arcade::IGames.

4.14.1.3 createTile()

```
std::shared_ptr< arcade::ITile > arcade::Nibbler::createTile ( ) [virtual]
```

Create a squared object to display.

Returns

std::shared_ptr<arcade::ITile> a pointer to the tile object

Implements arcade::IGames.

4.14.1.4 event()

```
arcade::Input arcade::Nibbler::event (
             arcade::Input input ) [virtual]
```

catch the event related to the game

@params arcade::Input

Returns

arcade::Input

Implements arcade::IGames.

4.14.1.5 loop()

```
std::vector< std::shared_ptr< arcade::IObject > > arcade::Nibbler::loop (
             arcade::Input input ) [virtual]
```

Loop the game.

Returns

std::vector<std::shared_ptr<IObject>> to be draw in the current graphical display

Implements arcade::IGames.

4.14.1.6 restart()

```
void arcade::Nibbler::restart ( ) [virtual]
```

Restart the entire game or the current loaded game.

Returns

void

Implements arcade::IGames.

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

- src/Games/Nibbler/includes/Nibbler.hpp
- src/Games/Nibbler/src/Nibbler.cpp

4.15 arcade::Pacman Class Reference

Inheritance diagram for arcade::Pacman:

Collaboration diagram for arcade::Pacman:

Classes

- class PacmanGame

Public Member Functions

- std::vector< std::shared_ptr< arcade::IObject > > loop (arcade::Input input)

  Loop the game.

- void restart ()

  Restart the entire game or the current loaded game.

- std::shared_ptr< arcade::ITile > createTile ()

  Create a squared object to display.

- std::shared_ptr< arcade::ISound > createSound ()

  Create a sound object to display.

- std::shared_ptr< arcade::IText > createText ()

  Create a text object to display.

- arcade::Input event (arcade::Input input)

  catch the event related to the game

4.15.1 Member Function Documentation

4.15.1.1 createSound()

```
std::shared_ptr<arcade::ISound> arcade::Pacman::createSound ( )  [virtual]
```

Create a sound object to display.

Returns

std::shared_ptr<arcade::ISound> a pointer to the sound object

Implements arcade::IGames.

4.15.1.2 createText()

```
std::shared_ptr<arcade::IText> arcade::Pacman::createText ( ) [virtual]
```

Create a text object to display.

Returns

std::shared_ptr<arcade::IText> a pointer to the text object

Implements arcade::IGames.

4.15.1.3 createTile()

```
std::shared_ptr<arcade::ITile> arcade::Pacman::createTile ( ) [virtual]
```

Create a squared object to display.

Returns

std::shared_ptr<arcade::ITile> a pointer to the tile object

Implements arcade::IGames.

4.15.1.4 event()

```
arcade::Input arcade::Pacman::event (
            arcade::Input input ) [virtual]
```

catch the event related to the game

@params arcade::Input

Returns

arcade::Input

Implements arcade::IGames.

4.15.1.5 loop()

```
std::vector<std::shared_ptr<arcade::IObject> > arcade::Pacman::loop (
            arcade::Input input ) [virtual]
```

Loop the game.

Returns

> std::vector<std::shared_ptr<IObject>> to be draw in the current graphical display

Implements arcade::IGames.

4.15.1.6 restart()

```
void arcade::Pacman::restart ( ) [virtual]
```

Restart the entire game or the current loaded game.

Returns

> void

Implements arcade::IGames.

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

- src/Games/Pacman/includes/Pacman.hpp
- src/Games/Pacman/src/Pacman.cpp

4.16 arcade::Pacman::PacmanGame Class Reference

Public Member Functions

- std::pair< std::size_t, std::size_t > **getPacman** () const
- std::vector< std::string > **getMap** () const
- std::vector< std::pair< std::size_t, std::size_t > > **getEnemies** () const
- int **getTick** () const
- int **getScore** () const
- std::vector< arcade::Input > **getEnemiesDir** () const
- bool **getEatingMod** () const
- void **setMap** (std::pair< std::size_t, std::size_t > pos, char c)
- void **setDir** (arcade::Input input)
- void **resetFood** ()
- void **Move** (std::pair< std::size_t, std::size_t > pos)
- void **enemyMove** (arcade::Input input, int id)
- void **enemyOut** ()
- bool **enemyPos** ()
- bool **foodEaten** ()
- void **restart** ()

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

- src/Games/Pacman/includes/Pacman.hpp
- src/Games/Pacman/src/Pacman.cpp

4.17 arcade::SDLDisplay Class Reference

Inheritance diagram for arcade::SDLDisplay:

Collaboration diagram for arcade::SDLDisplay:

Classes

- struct Colors

Public Member Functions

- void display ()

    Enumerate the possible actions in the arcarde box.
- void clear ()

    Clear current loaded library window from its drawed elements.
- void draw (std::shared_ptr< arcade::IObject > object)

    Draw object on the scene from the current @params arcade::IObject to be draw in the current graphic library.
- arcade::Input event ()

    Handle events from the current loaded graphic library.
- void **initColor** ()

4.17.1 Member Function Documentation

4.17.1.1 clear()

```
void arcade::SDLDisplay::clear ( )  [virtual]
```

Clear current loaded library window from its drawed elements.

Returns

void

Implements arcade::IGraphics.

4.17.1.2 display()

```
void arcade::SDLDisplay::display ( )  [virtual]
```

Enumerate the possible actions in the arcarde box.

Display elements from the current loaded graphic library

Returns

void

Implements arcade::IGraphics.

4.17.1.3 draw()

```
void arcade::SDLDisplay::draw (
            std::shared_ptr< arcade::IObject > object )  [virtual]
```

Draw object on the scene from the current @params arcade::IObject to be draw in the current graphic library.

Returns

void

Implements arcade::IGraphics.

4.17.1.4 event()

```
arcade::Input arcade::SDLDisplay::event ( )  [virtual]
```

Handle events from the current loaded graphic library.

Returns

arcade::Input corresponds to the last events from the loaded graphic library

Implements arcade::IGraphics.

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

- src/Graphics/SDL/includes/SDLDisplay.hpp
- src/Graphics/SDL/src/SDLDisplay.cpp

4.18 arcade::SFMLDisplay Class Reference

Inheritance diagram for arcade::SFMLDisplay:

Collaboration diagram for arcade::SFMLDisplay:

Public Member Functions

- void display () override

    Enumerate the possible actions in the arcarde box.
- void clear () override

    Clear current loaded library window from its drawed elements.
- void draw (std::shared_ptr< arcade::IObject > object) override

    Draw object on the scene from the current @params arcade::IObject to be draw in the current graphic library.
- arcade::Input event () override

    Handle events from the current loaded graphic library.

4.18.1 Member Function Documentation

4.18.1.1 clear()

```
void arcade::SFMLDisplay::clear ( )  [override], [virtual]
```

Clear current loaded library window from its drawed elements.

Returns

void

Implements arcade::IGraphics.

4.18.1.2 display()

```
void arcade::SFMLDisplay::display ( )  [override], [virtual]
```

Enumerate the possible actions in the arcarde box.

Display elements from the current loaded graphic library

Returns

void

Implements arcade::IGraphics.

4.18.1.3 draw()

```
void arcade::SFMLDisplay::draw (
            std::shared_ptr< arcade::IObject > object )  [override], [virtual]
```

Draw object on the scene from the current @params arcade::IObject to be draw in the current graphic library.

Returns

void

Implements arcade::IGraphics.

4.18.1.4 event()

```
arcade::Input arcade::SFMLDisplay::event ( )  [override], [virtual]
```

Handle events from the current loaded graphic library.

Returns

arcade::Input corresponds to the last events from the loaded graphic library

Implements arcade::IGraphics.

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

- src/Graphics/SFML/includes/SFMLDisplay.hpp
- src/Graphics/SFML/src/SFMLDisplay.cpp

4.19 arcade::Snake Class Reference

Inheritance diagram for arcade::Snake:

Collaboration diagram for arcade::Snake:

Classes

- class SnakeGame

Public Types

- enum **Direction** { **UP**, **DOWN**, **LEFT**, **RIGHT** }

Public Member Functions

- std::vector< std::shared_ptr< arcade::IObject > > loop (arcade::Input input)

  Loop the game.
- void restart ()

  Restart the entire game or the current loaded game.
- std::shared_ptr< arcade::ITile > createTile ()

  Create a squared object to display.
- std::shared_ptr< arcade::ISound > createSound ()

  Create a sound object to display.
- std::shared_ptr< arcade::IText > createText ()

  Create a text object to display.
- arcade::Input event (arcade::Input input)

  catch the event related to the game

4.19.1 Member Function Documentation

4.19.1.1 createSound()

```
std::shared_ptr< arcade::ISound > arcade::Snake::createSound ( )  [virtual]
```

Create a sound object to display.

Returns

std::shared_ptr<arcade::ISound> a pointer to the sound object

Implements arcade::IGames.

4.19.1.2 createText()

```
std::shared_ptr< arcade::IText > arcade::Snake::createText ( )  [virtual]
```

Create a text object to display.

Returns

std::shared_ptr<arcade::IText> a pointer to the text object

Implements arcade::IGames.

4.19.1.3 createTile()

```
std::shared_ptr< arcade::ITile > arcade::Snake::createTile ( )  [virtual]
```

Create a squared object to display.

Returns

std::shared_ptr<arcade::ITile> a pointer to the tile object

Implements arcade::IGames.

4.19.1.4 event()

```
arcade::Input arcade::Snake::event (
            arcade::Input input ) [virtual]
```

catch the event related to the game

@params arcade::Input

Returns

arcade::Input

Implements arcade::IGames.

4.19.1.5 loop()

```
std::vector< std::shared_ptr< arcade::IObject > > arcade::Snake::loop (
            arcade::Input input ) [virtual]
```

Loop the game.

Returns

std::vector<std::shared_ptr<IObject>> to be draw in the current graphical display

Implements arcade::IGames.

4.19.1.6 restart()

```
void arcade::Snake::restart ( ) [virtual]
```

Restart the entire game or the current loaded game.

Returns

void

Implements arcade::IGames.

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

- src/Games/Snake/includes/Snake.hpp
- src/Games/Snake/src/Snake.cpp

4.20   arcade::Snake::SnakeGame Class Reference

Public Member Functions

- std::vector< std::pair< std::size_t, std::size_t > > **getSnake** () const
- void **setDir** (Direction dir)
- arcade::Snake::Direction **getDir** () const
- bool **Move** (std::pair< std::size_t, std::size_t > posFood)
- void **restart** ()

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

- src/Games/Snake/includes/Snake.hpp
- src/Games/Snake/src/Snake.cpp

4.21   arcade::Nibbler::SnakeGame Class Reference

Public Member Functions

- std::vector< std::pair< std::size_t, std::size_t > > **getSnake** () const
- void **setDir** (Direction dir)
- arcade::Nibbler::Direction **getDir** () const
- bool **Move** (std::pair< std::size_t, std::size_t > posFood, std::pair< std::size_t, std::size_t > pos)
- void **restart** ()
- void **initMap** ()
- std::vector< std::string > **getMap** () const
- void **clear** ()

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

- src/Games/Nibbler/includes/Nibbler.hpp
- src/Games/Nibbler/src/Nibbler.cpp

4.22   arcade::Sound Class Reference

Inheritance diagram for arcade::Sound:

Collaboration diagram for arcade::Sound:

Public Member Functions

- std::string getSoundPath () const override

    Get the sound path.
- float getVolume () const override

    Get the volume of the sound.
- void setSoundPath (std::string path) override

    Set the sound path.
- void setVolume (float volume) override

    Set the volume of the sound.
- void pauseSound () override

    Pause the sound.
- void playSound () override

    Start or resume the sound.
- void stopSound () override

    Stop the sound and reset it (unlike pauseSound())

4.22.1 Member Function Documentation

4.22.1.1 getSoundPath()

```
std::string arcade::Sound::getSoundPath ( ) const  [inline], [override], [virtual]
```

Get the sound path.

Returns

    std::string

Implements arcade::ISound.

4.22.1.2 getVolume()

```
float arcade::Sound::getVolume ( ) const  [inline], [override], [virtual]
```

Get the volume of the sound.

Returns

    float

Implements arcade::ISound.

4.22.1.3 pauseSound()

```
void arcade::Sound::pauseSound ( )  [inline], [override], [virtual]
```

Pause the sound.

Returns

void

Implements arcade::ISound.

4.22.1.4 playSound()

```
void arcade::Sound::playSound ( )  [inline], [override], [virtual]
```

Start or resume the sound.

Returns

void

Implements arcade::ISound.

4.22.1.5 setSoundPath()

```
void arcade::Sound::setSoundPath (
            std::string path )  [inline], [override], [virtual]
```

Set the sound path.

@params std::string

Returns

void

Implements arcade::ISound.

4.22.1.6 setVolume()

```
void arcade::Sound::setVolume (
            float volume ) [inline], [override], [virtual]
```

Set the volume of the sound.

@params float

Returns

void

Implements [arcade::ISound](#).

4.22.1.7 stopSound()

```
void arcade::Sound::stopSound ( ) [inline], [override], [virtual]
```

Stop the sound and reset it (unlike [pauseSound()](#))

Returns

void

Implements [arcade::ISound](#).

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

- includes/Object/Sound.hpp

4.23 arcade::Text Class Reference

Inheritance diagram for arcade::Text:

Collaboration diagram for arcade::Text:

Public Member Functions

- std::string getText () const override

    Get the text.
- arcade::Color getColorText () const override

    Get the color of text.
- std::pair< std::size_t, std::size_t > getPosition () const override

    Get the position of text.
- void setText (std::string text) override

    Set the text.
- void setColorText (arcade::Color color) override

    Set the color of the text.
- void setPosition (std::pair< std::size_t, std::size_t > position) override

    Set the position of the text.
- void setRotation (float rotation) override

    Set the rotation of the object.
- std::pair< float, float > getOriginScale () override

    Get the origin value of the scale.
- std::pair< std::size_t, std::size_t > getOriginPosition () override

    Get the origin value of the position.
- void setOriginScale (std::pair< float, float > scale) override

    Set the origin value of the scale.
- void setOriginPosition (std::pair< std::size_t, std::size_t > position) override

    Set the origin value of the position.
- void setEvent (arcade::Input event) override

    Set the event that the tile must trigger.
- arcade::Input getEvent () const override

    Get the event that the tile must trigger.
- std::pair< float, float > getScale () const override

    Get the scale of the object.
- void setScale (std::pair< float, float > scale) override

    Set the scale of the object.

4.23.1 Member Function Documentation

4.23.1.1 getColorText()

```
arcade::Color arcade::Text::getColorText ( ) const  [inline], [override], [virtual]
```

Get the color of text.

Returns

    arcade::Color

Implements arcade::IText.

4.23.1.2 getEvent()

`arcade::Input arcade::Text::getEvent ( ) const  [inline], [override], [virtual]`

Get the event that the tile must trigger.

@params

Returns

arcade::Input

Implements arcade::IText.

4.23.1.3 getOriginPosition()

`std::pair<std::size_t, std::size_t> arcade::Text::getOriginPosition ( )  [inline], [override], [virtual]`

Get the origin value of the position.

@params

@returnstd::pair<std::size_t, std::size_t>

Implements arcade::IText.

4.23.1.4 getOriginScale()

`std::pair<float, float> arcade::Text::getOriginScale ( )  [inline], [override], [virtual]`

Get the origin value of the scale.

@params

Returns

std::pair<float, float>

Implements arcade::IText.

4.23.1.5 getPosition()

```
std::pair<std::size_t, std::size_t> arcade::Text::getPosition ( ) const  [inline], [override],
[virtual]
```

Get the position of text.

Returns

std::pair<std::size_t, std::size_t>

Implements [arcade::IText](#).

4.23.1.6 getScale()

```
std::pair<float, float> arcade::Text::getScale ( ) const  [inline], [override], [virtual]
```

Get the scale of the object.

Returns

std::pair<float, float>

Implements [arcade::IText](#).

4.23.1.7 getText()

```
std::string arcade::Text::getText ( ) const  [inline], [override], [virtual]
```

Get the text.

Returns

std::string

Implements [arcade::IText](#).

4.23.1.8 setColorText()

```
void arcade::Text::setColorText (
            arcade::Color  ) [inline], [override], [virtual]
```

Set the color of the text.

@params arcade::Color

Returns

void

Implements [arcade::IText](#).

4.23.1.9 setEvent()

```
void arcade::Text::setEvent (
            arcade::Input event ) [inline], [override], [virtual]
```

Set the event that the tile must trigger.

@params

Returns

arcade::Input

Implements [arcade::IText](#).

4.23.1.10 setOriginPosition()

```
void arcade::Text::setOriginPosition (
            std::pair< std::size_t, std::size_t > position ) [inline], [override], [virtual]
```

Set the origin value of the position.

@params

Returns

std::pair<std::size_t, std::size_t>

Implements [arcade::IText](#).

4.23.1.11 setOriginScale()

```
void arcade::Text::setOriginScale (
            std::pair< float, float > scale )  [inline], [override], [virtual]
```

Set the origin value of the scale.

@params

Returns

std::pair<float, float>

Implements [arcade::IText](#).

4.23.1.12 setPosition()

```
void arcade::Text::setPosition (
            std::pair< std::size_t, std::size_t >  )  [inline], [override], [virtual]
```

Set the position of the text.

@params std::pair<std::size_t, std::size_t>

Returns

void

Implements [arcade::IText](#).

4.23.1.13 setRotation()

```
void arcade::Text::setRotation (
            float rotation )  [inline], [override], [virtual]
```

Set the rotation of the object.

@params float

Returns

void

Implements [arcade::IText](#).

4.23.1.14 setScale()

```
void arcade::Text::setScale (
              std::pair< float, float > scale ) [inline], [override], [virtual]
```

Set the scale of the object.

@params std::pair<std::size_t, std::size_t>

Returns

void

Implements [arcade::IText](#).

4.23.1.15 setText()

```
void arcade::Text::setText (
              std::string text ) [inline], [override], [virtual]
```

Set the text.

@params std::string

Returns

void

Implements [arcade::IText](#).

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

- includes/Object/Text.hpp

4.24 arcade::Tile Class Reference

Inheritance diagram for arcade::Tile:

Collaboration diagram for arcade::Tile:

Public Member Functions

- std::string getTexture () const override

  Get the path for texture of the object for SFML & SDL Library.
- std::pair< std::size_t, std::size_t > getPosition () const override

  Get the Position x y of the object.
- char getCharacter () const override

  Get the characters to display for the NCurses library.
- arcade::Color getColor () const override

  Get the color of the object.
- std::pair< float, float > getScale () const override

  Get the scale of the object.
- float getRotation () const override

  Get the rotation of the object.
- void setTexture (std::string path) override

  Set the path for texture of the object for SFML & SDL Library.
- void setPosition (std::pair< std::size_t, std::size_t > pos) override

  Set the position of the object.
- void setCharacter (char c) override

  Set the character of the object for NCurses library.
- void setColor (arcade::Color color) override

  Set the color of the object.
- void setScale (std::pair< float, float > scale) override

  Set the scale of the object.
- void setRotation (float rotation) override

  Set the rotation of the object.
- std::pair< float, float > getOriginScale () override

  Get the origin value of the scale.
- std::pair< std::size_t, std::size_t > getOriginPosition () override

  Get the origin value of the position.
- void setOriginScale (std::pair< float, float > scale) override

  Set the origin value of the scale.
- void setOriginPosition (std::pair< std::size_t, std::size_t > position) override

  Set the origin value of the position.
- void setEvent (arcade::Input event) override

  Set the event that the tile must trigger.
- arcade::Input getEvent () const override

  Get the event that the tile must trigger.
- void setName (std::string name) override

  Set the an unique name to a tile.
- std::string getName () const override

  Get the the unique name of the tile.

4.24.1 Member Function Documentation

4.24.1.1 getCharacter()

```
char arcade::Tile::getCharacter ( ) const  [inline], [override], [virtual]
```

Get the characters to display for the NCurses library.

Returns

> char

Implements [arcade::ITile](#).

4.24.1.2 getColor()

```
arcade::Color arcade::Tile::getColor ( ) const  [inline], [override], [virtual]
```

Get the color of the object.

Returns

> arcade::Color

Implements [arcade::ITile](#).

4.24.1.3 getEvent()

```
arcade::Input arcade::Tile::getEvent ( ) const  [inline], [override], [virtual]
```

Get the event that the tile must trigger.

@params

Returns

> arcade::Input

Implements [arcade::ITile](#).

4.24.1.4 getName()

```
std::string arcade::Tile::getName ( ) const  [inline], [override], [virtual]
```

Get the the unique name of the tile.

@params

Returns

std::string

Implements arcade::ITile.

4.24.1.5 getOriginPosition()

```
std::pair<std::size_t, std::size_t> arcade::Tile::getOriginPosition ( )  [inline], [override],
[virtual]
```

Get the origin value of the position.

@params

@returnstd::pair<std::size_t, std::size_t>

Implements arcade::ITile.

4.24.1.6 getOriginScale()

```
std::pair<float, float> arcade::Tile::getOriginScale ( )  [inline], [override], [virtual]
```

Get the origin value of the scale.

@params

Returns

std::pair<float, float>

Implements arcade::ITile.

4.24.1.7 getPosition()

```
std::pair<std::size_t, std::size_t> arcade::Tile::getPosition ( ) const  [inline], [override],
[virtual]
```

Get the Position x y of the object.

Returns

std::pair<std::size_t, std::size_t>

Implements arcade::ITile.

4.24.1.8 getRotation()

```
float arcade::Tile::getRotation ( ) const  [inline], [override], [virtual]
```

Get the rotation of the object.

Returns

float

Implements arcade::ITile.

4.24.1.9 getScale()

```
std::pair<float, float> arcade::Tile::getScale ( ) const  [inline], [override], [virtual]
```

Get the scale of the object.

Returns

std::pair<float, float>

Implements arcade::ITile.

4.24.1.10 getTexture()

```
std::string arcade::Tile::getTexture ( ) const  [inline], [override], [virtual]
```

Get the path for texture of the object for SFML & SDL Library.

Returns

std::string

Implements arcade::ITile.

4.24.1.11 setCharacter()

```
void arcade::Tile::setCharacter (
            char c ) [inline], [override], [virtual]
```

Set the character of the object for NCurses library.

@params char

Returns

void

Implements [arcade::ITile](#).

4.24.1.12 setColor()

```
void arcade::Tile::setColor (
            arcade::Color color ) [inline], [override], [virtual]
```

Set the color of the object.

@params arcade::Color

Returns

void

Implements [arcade::ITile](#).

4.24.1.13 setEvent()

```
void arcade::Tile::setEvent (
            arcade::Input event ) [inline], [override], [virtual]
```

Set the event that the tile must trigger.

@params

Returns

arcade::Input

Implements [arcade::ITile](#).

4.24.1.14 setName()

```
void arcade::Tile::setName (
            std::string name )  [inline], [override], [virtual]
```

Set the an unique name to a tile.

@params std::string

Returns

Implements [arcade::ITile](#).

4.24.1.15 setOriginPosition()

```
void arcade::Tile::setOriginPosition (
            std::pair< std::size_t, std::size_t > position )  [inline], [override], [virtual]
```

Set the origin value of the position.

@params

Returns

std::pair<std::size_t, std::size_t>

Implements [arcade::ITile](#).

4.24.1.16 setOriginScale()

```
void arcade::Tile::setOriginScale (
            std::pair< float, float > scale )  [inline], [override], [virtual]
```

Set the origin value of the scale.

@params

Returns

std::pair<float, float>

Implements [arcade::ITile](#).

4.24.1.17 setPosition()

```
void arcade::Tile::setPosition (
            std::pair< std::size_t, std::size_t > position )  [inline], [override], [virtual]
```

Set the position of the object.

@params std::pair<std::size_t, std::size_t>

Returns

void

Implements [arcade::ITile](#).

4.24.1.18 setRotation()

```
void arcade::Tile::setRotation (
            float rotation )  [inline], [override], [virtual]
```

Set the rotation of the object.

@params float

Returns

void

Implements [arcade::ITile](#).

4.24.1.19 setScale()

```
void arcade::Tile::setScale (
            std::pair< float, float > position )  [inline], [override], [virtual]
```

Set the scale of the object.

@params std::pair<std::size_t, std::size_t>

Returns

void

Implements [arcade::ITile](#).

4.24.1.20 setTexture()

```
void arcade::Tile::setTexture (
            std::string path )  [inline], [override], [virtual]
```

Set the path for texture of the object for SFML & SDL Library.

@params std::string

Returns

void

Implements [arcade::ITile](#).

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

- includes/Object/Tile.hpp