

Arcade

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1.1 [Unreleased]- [2023-03-09] 1: [+] some doc file and games folder version: 0.0.1	1
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Chapter 1

Changelog

All notable changes to this project will be documented in this file.

The format is based on [Keep a Changelog], and this project adheres to [Semantic Versioning].

1.1 [Unreleased]- [2023-03-09] 1: [+] some doc file and games folder version: 0.0.1

- [2023-03-13] 1: + new interface version
- [2023-03-13] 1: [+] start of Game Module System functions
- [2023-03-13] 1: [+~] end of system function, and getUserInput, removed from [IGameModule](#)
- [2023-03-14] 1: [+] [Entity](#) class and functions in Abstract Class
- [2023-03-14] 1: [+] [Entity](#) clas
- [2023-03-14] 1: [+] [Entity](#) empty constructor
- [2023-03-14] 1: [~] correct functions for compilation
- [2023-03-14] 1: [~] Correct makefile
- [2023-03-15] 1: [+][~] New core folder with [Core](#) class, and main function, modified Proptype Enum, to not typedef
- [2023-03-15] 1: [-] .vscode
- [2023-03-16] 1: [+] start of core
- [2023-03-16] 1: [+] core rule for makefile
- [2023-03-16] 1: [+] start of loading the libs
- [2023-03-16] 1: Merge remote-tracking branch 'refs/remotes/origin/main'
- [2023-03-16] 1.0.1: [+] Exception class for [Core](#) version 1.0.1
- [2023-03-18] 1: [~][-] [IGameModule](#) Interface changed, to not have subclasses, removed errors done by all this changes.
- [2023-03-19] 1: [+] system function for agame
- [2023-03-19] 1: [+] some functions of entity in [AGame](#) class

- [2023-03-19] 1: [+] clear and pop functions for entity list
- [2023-03-19] 1: [+] props function in [AGame](#)
- [2023-03-20] 1: [+] [Core](#) is compiling
- [2023-03-20] 1: [+] display the libs available
- [2023-03-20] 1: [+] display available libs, and author name
- [2023-03-20] 1: [~] removed comments in the makefile, to make lib graphical ncurses
- [2023-03-20] 1: [-] removed comment in the fclean rule of the main makefile
- [2023-03-21] 1: [+] add functions for [IDispModule](#)
- [2023-03-21] 1: Merge remote-tracking branch 'refs/remotes/origin/main'
- [2023-03-21] 1: [+] good implementation
- [2023-03-21] 1: [+] [Prop](#) fonctionnal class
- [2023-03-21] 1: [+] [Text](#) Class
- [2023-03-22] 1: [+] appel correct des fonctions
- [2023-03-23] 1: [+] take args to launch ./arcade
- [2023-03-24] 1: [+] add the good list of graphics libs
- [2023-03-24] 1: [+] start of the menu
- [2023-03-27] 1: [+] list the available libs
- [2023-03-27] 1: [+] click Action void *
- [2023-03-27] 1: [+] hello
- [2023-03-27] 1: Merge remote-tracking branch 'refs/remotes/origin/main'
- [2023-03-27] 1: [+] no more segfault
- [2023-03-27] 1: [+] lib ncurses draw text
- [2023-03-28] 1: [+] update function for ncurses, if not i cant launch it
- [2023-03-28] 1: [+] doxygen generator
- [2023-03-28] 1: [+] la libncurses compile
- [2023-03-28] 1: [+] setSpriteChar
- [2023-03-29] 1: [+] good changelog
- [2023-03-29] 1: [+] good comments syntax
- [2023-03-30] 1: [~] SDL: Modify the try catch
- [2023-03-30] 1: [~] SDL: Modify the try catch
- [2023-03-30] 1: [+] setUserInput function
- [2023-03-30] 1: [~] [IDispModule](#), SFML & SDL: Comments for documentation
- [2023-03-31] 1: [~] SDL: [Snake](#) can now move
- [2023-03-31] 1: [+] SFML & [Text](#): Add a score, Texts can now be drawn
- [2023-03-31] 1: [~] Doc: [Text](#) and [Prop](#)
- [2023-03-31] 1: [+] NO MORE SEGFAULT

- [2023-03-31] 1: [+] start of rotation, not perfect for now
- [2023-03-31] 1: [~] more natural rotation
- [2023-04-01] 1: [+] start to display the apple, at some random locations
- [2023-04-03] 1: [+] [~] [Snake](#): resize images ; [Snake](#): Score and background ; [Core](#) & Graphical libs: Score
- [2023-04-03] 1: [~] [Snake](#): New positions and change assets
- [2023-04-04] 1: [+] SDL: Draw and Add for Texts ; [Core](#): Score is not lost anymore
- [2023-04-04] 1: [~] [Snake](#): One apple at the beginning, changed its position
- [2023-04-04] 1: [~] [Snake](#): Fix double apple bug & better random algorithm
- [2023-04-04] 1: [+] [Pacman](#): files ; SFML: try catch
- [2023-04-04] 1: [+] [~] Keys: Handles Escape and Enter ; SDL: Fix a crash
- [2023-04-04] 1: [+] Doc: All functions are now commented
- [2023-04-04] 1: [+] start displacement + collision et retour au menu
- [2023-04-05] 1: [+] starting of good direction key and collisions
- [2023-04-05] 1: [~] General: Score is now written in a txt
- [2023-04-05] 1: [~] Doc: writeScore()
- [2023-04-05] 1: [+] [Pacman](#): New assets
- [2023-04-05] 1: [+] border wall for pacman
- [2023-04-05] 1: [+] start displacement du snake
- [2023-04-05] 1: [+] pouet
- [2023-04-05] 1: [+] dlclose
- [2023-04-05] 1: [+] start displacement du snake
- [2023-04-05] 1: [+] Graphical: clearEntity and getEntities
- [2023-04-05] 1: [~] SDL2: Fix crash in initRender()

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

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

Core	33
Entity	35
std::exception	
Core::CoreException	34
LibNcurses::LibNcursesException	108
LibSdl::LibSdlException	130
LibSfml::LibSfmlException	152
Ncurses::NcursesException	163
IDispModule	44
LibNcurses	87
LibSdl	110
LibSfml	131
IGameModule	64
AGame	9
Menu	153
Pacman	164
Snake	204
Ncurses	157
Prop	181
Sdl	189
Text	220

Chapter 3

Class Index

3.1 Class List

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

AGame	
AGame class	9
Core	33
Core::CoreException	34
Entity	35
IDispModule	44
IGameModule	64
LibNcurses	87
LibNcurses::LibNcursesException	108
LibSdl	110
LibSdl::LibSdlException	130
LibSfml	131
LibSfml::LibSfmlException	152
Menu	153
Ncurses	157
Ncurses::NcursesException	163
Pacman	164
Prop	181
Sdl	189
Snake	204
Text	220

Chapter 4

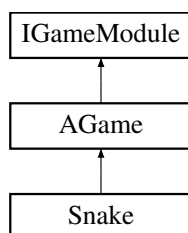
Class Documentation

4.1 AGame Class Reference

AGame class.

```
#include <AGame.hpp>
```

Inheritance diagram for AGame:



Public Member Functions

- [AGame \(\)](#)
AGame constructor.
- [~AGame \(\)](#)
AGame destructor.
- State [systemInit \(\)](#) override
systemInit function
- State [systemStart \(\)](#) override
systemStart function
- State [systemStop \(\)](#) override
systemStop function
- State [systemClear \(\)](#) override
systemClear function
- State [systemUpdate \(\)](#) override
systemUpdate function
- State [systemGetState \(\)](#) const override
systemGetState function

- void [systemSetState](#) (State) override
systemSetState function
- void [systemOnUserInput](#) (int) override
systemOnUserInput function
- void [systemDebug](#) () override
systemDebug function
- std::vector< [Entity](#) * > [entityGetAll](#) () override
entityGetAll function
- [Entity](#) * [entityGet](#) (Id) override
entityGet function
- [Entity](#) * [entityGet](#) (Name) override
entityGet function
- std::vector< [Entity](#) * > [entityGetAllOfType](#) (EntityType) override
entityGetAllOfType function
- Id [entityGetId](#) (Name) override
entitygetId function
- Name [entityGetName](#) (Id) override
entityGetName function
- std::vector< float > [entityGetProperty](#) (Id, Property) override
entityGetProperty function
- bool [entityUpdate](#) (Id, Property, int) override
entityUpdate function
- bool [entityUpdate](#) (Id, Property, float) override
entityUpdate function
- bool [entityUpdate](#) (Id, Property, std::vector< float >) override
entityUpdate function
- bool [entityUpdate](#) (Id, Property, std::vector< int >) override
entityUpdate function
- bool [entityUpdate](#) (Id, Property, Name) override
entityUpdate function
- bool [entityPush](#) ([Entity](#)) override
- bool [entityPush_front](#) ([Entity](#)) override
- bool [entityRemove](#) (Id) override
entityRemove function
- bool [entityPop](#) () override
entityRemove function
- bool [entityPop_front](#) () override
entityPop_front function
- bool [entityClearAll](#) () override
entityClearAll function
- std::vector< [Text](#) * > [textGetAll](#) () override
textGetAll function
- std::vector< [Prop](#) * > [propGetAll](#) () override
propGetAll function
- [Prop](#) [propGet](#) (Id) override
propGet function
- std::vector< [Prop](#) * > [propGetAllOfType](#) (PropType) override
propGetAllOfType function
- std::vector< float > [propGetProperty](#) (Id, Property) override
propGetProperty function
- bool [propUpdate](#) (Id, Property, int) override

- propUpdate function*
- bool [propUpdate](#) (Id, Property, float) override
- propUpdate function*
- bool [propUpdate](#) (Id, Property, std::vector< float >) override
- propUpdate function*
- bool [propUpdate](#) (Id, Property, std::vector< int >) override
- propUpdate function*
- bool [propUpdate](#) (Id, Property, Name) override
- propUpdate function*
- bool **propPush** ([Prop](#)) override
- bool **propPush_front** ([Prop](#)) override
- bool [propRemove](#) (Id) override
- propRemove function*
- bool [propPop](#) () override
- propPop function*
- bool [propPop_front](#) () override
- propPop_front function*
- bool [propClearAll](#) () override
- propClearAll function*
- int [getScore](#) () const override
- getScore function*
- void [setScore](#) (int score) override
- setScore function*

4.1.1 Detailed Description

[AGame](#) class.

Author

Louis

Date

2023-15-03

This class is the base class for all games It contains all the functions that are needed for a game It is an abstract class

4.1.2 Constructor & Destructor Documentation

4.1.2.1 AGame()

`AGame::AGame ()`

[AGame](#) constructor.

Author

Louis

Parameters

<i>void</i>	
-------------	--

4.1.2.2 ~AGame()

```
AGame::~~AGame ( )
```

[AGame](#) destructor.

Author

Louis

Parameters

<i>void</i>	
-------------	--

4.1.3 Member Function Documentation**4.1.3.1 entityClearAll()**

```
bool AGame::entityClearAll ( ) [override], [virtual]
```

entityClearAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.2 entityGet() [1/2]

```
Entity* AGame::entityGet (
    Id ) [override], [virtual]
```

entityGet function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

Entity *

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.3 entityGet() [2/2]

```
Entity* AGame::entityGet (
    Name ) [override], [virtual]
```

entityGet function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

Entity *

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.4 entityGetAll()

```
std::vector< Entity * > AGame::entityGetAll ( ) [override], [virtual]
```

entityGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Entity *>

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.5 entityGetAllOfType()

```
std::vector< Entity * > AGame::entityGetAllOfType (
    EntityType ) [override], [virtual]
```

entityGetAllOfType function

Author

Louis

Parameters

<i>EntityType</i>	type
-------------------	------

Returns

std::vector<Entity *>

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.6 entityGetId()

```
Id AGame::entityGetId (
    Name ) [override], [virtual]
```

entitygetId function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

Id id

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.7 entityGetName()

```
Name AGame::entityGetName (
    Id ) [override], [virtual]
```

entityGetName function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

Name name

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.8 entityGetProperty()

```
std::vector< float > AGame::entityGetProperty (
    Id ,
    Property ) [override], [virtual]
```

entityGetProperty function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property

Returns

int

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.9 entityPop()

```
bool AGame::entityPop ( ) [override], [virtual]
```

entityRemove function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

bool

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.10 entityPop_front()

```
bool AGame::entityPop_front ( ) [override], [virtual]
```

entityPop_front function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.11 entityRemove()

```
bool AGame::entityRemove (
    Id ) [override], [virtual]
```

entityRemove function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.12 entityUpdate() [1/5]

```
bool AGame::entityUpdate (
    Id ,
    Property ,
    float ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>float</i>	value

Returns

bool

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.13 entityUpdate() [2/5]

```
bool AGame::entityUpdate (
    Id ,
    Property ,
    int ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>int</i>	value

Returns

bool

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.14 entityUpdate() [3/5]

```
bool AGame::entityUpdate (
    Id ,
    Property ,
    Name ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>Name</i>	name

Returns

bool

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.15 entityUpdate() [4/5]

```
bool AGame::entityUpdate (
    Id ,
    Property ,
    std::vector< float > ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<float></i>	value

Returns

bool

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.16 entityUpdate() [5/5]

```
bool AGame::entityUpdate (
    Id ,
    Property ,
    std::vector< int > ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<int></i>	value

Returns

bool

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.17 getScore()

```
int AGame::getScore ( ) const [override], [virtual]
```

getScore function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

int

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.18 propClearAll()

```
bool AGame::propClearAll ( ) [override], [virtual]
```

propClearAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IGameModule](#).

4.1.3.19 propGet()

```
Prop AGame::propGet (
    Id ) [override], [virtual]
```

propGet function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

[Prop](#) *

Implements [IGameModule](#).

4.1.3.20 propGetAll()

```
std::vector< Prop * > AGame::propGetAll ( ) [override], [virtual]
```

propGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Prop *>

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.21 propGetAllOfType()

```
std::vector< Prop * > AGame::propGetAllOfType (
    PropType ) [override], [virtual]
```

propGetAllOfType function

Author

Louis

Parameters

<i>PropType</i>	type
-----------------	------

Returns

std::vector<Prop *>

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.22 propGetProperty()

```
std::vector< float > AGame::propGetProperty (
    Id ,
    Property ) [override], [virtual]
```

propGetProperty function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property

Returns

std::vector<float>

Implements [IGameModule](#).

4.1.3.23 propPop()

```
bool AGame::propPop ( ) [override], [virtual]
```

propPop function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IGameModule](#).

4.1.3.24 propPop_front()

```
bool AGame::propPop_front ( ) [override], [virtual]
```

propPop_front function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IGameModule](#).

4.1.3.25 propRemove()

```
bool AGame::propRemove (
    Id ) [override], [virtual]
```

propRemove function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IGameModule](#).

4.1.3.26 propUpdate() [1/5]

```
bool AGame::propUpdate (
    Id ,
    Property ,
    float ) [override], [virtual]
```

propUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>float</i>	value

Implements [IGameModule](#).

4.1.3.27 propUpdate() [2/5]

```
bool AGame::propUpdate (
    Id ,
    Property ,
    int ) [override], [virtual]
```

propUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>int</i>	value

Returns

bool

Implements [IGameModule](#).

4.1.3.28 propUpdate() [3/5]

```
bool AGame::propUpdate (
    Id ,
    Property ,
    Name ) [override], [virtual]
```

propUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>Name</i>	name

Returns

bool

Implements [IGameModule](#).

4.1.3.29 propUpdate() [4/5]

```
bool AGame::propUpdate (
    Id ,
    Property ,
    std::vector< float > ) [override], [virtual]
```

propUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<float></i>	value

Returns

bool

Implements [IGameModule](#).

4.1.3.30 propUpdate() [5/5]

```
bool AGame::propUpdate (
    Id ,
    Property ,
    std::vector< int > ) [override], [virtual]
```

propUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<int></i>	value

Returns

bool

Implements [IGameModule](#).

4.1.3.31 setScore()

```
void AGame::setScore (
    int score ) [override], [virtual]
```

setScore function

Author

Paul

Parameters

<i>int</i>	score
------------	-------

Returns

void

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.32 systemClear()

```
State AGame::systemClear ( ) [override], [virtual]
```

systemClear function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.33 systemDebug()

```
void AGame::systemDebug ( ) [override], [virtual]
```

systemDebug function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

void

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.34 systemGetState()

```
State AGame::systemGetState ( ) const [override], [virtual]
```

systemGetState function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.35 systemInit()

```
State AGame::systemInit ( ) [override], [virtual]
```

systemInit function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.36 systemOnUserInput()

```
void AGame::systemOnUserInput (  
    int ) [override], [virtual]
```

systemOnUserInput function

Author

Louis

Parameters

<i>int</i>	input
------------	-------

Returns

void

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.37 systemSetState()

```
void AGame::systemSetState (  
    State ) [override], [virtual]
```

systemSetState function

Author

Louis

Parameters

<i>State</i>	state
--------------	-------

Returns

void

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.38 systemStart()

```
State AGame::systemStart ( ) [override], [virtual]
```

systemStart function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.39 systemStop()

```
State AGame::systemStop ( ) [override], [virtual]
```

systemStop function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.40 systemUpdate()

```
State AGame::systemUpdate ( ) [override], [virtual]
```

systemUpdate function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

4.1.3.41 textGetAll()

```
std::vector< Text * > AGame::textGetAll ( ) [override], [virtual]
```

textGetAll function

Author

Louis

Parameters

<code>void</code>	
-------------------	--

Returns

`std::vector<Text *>`

Implements [IGameModule](#).

Reimplemented in [Snake](#), and [Pacman](#).

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

- `src/lib/games/AGame.hpp`
- `src/lib/games/AGame.cpp`

4.2 Core Class Reference

Classes

- class [CoreException](#)

Public Member Functions

- [Core](#) (int, char **)
[Core](#) constructor.
- [~Core](#) ()
[Core](#) destructor.

4.2.1 Constructor & Destructor Documentation

4.2.1.1 Core()

```
Core::Core (
    int ac,
    char ** av )
```

[Core](#) constructor.

Author

Louis

Parameters

<i>int</i>	argc
<i>char</i>	**argv

4.2.1.2 ~Core()

Core::~~Core ()

Core destructor.

Author

Louis

Parameters

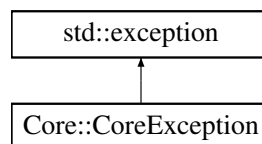
<i>void</i>	
-------------	--

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

- src/core/Core.hpp
- src/core/Core.cpp

4.3 Core::CoreException Class Reference

Inheritance diagram for Core::CoreException:

**Public Member Functions**

- [CoreException](#) (const std::string &message)
CoreException constructor.
- const char * [what](#) () const noexcept override
what function

4.3.1 Constructor & Destructor Documentation

4.3.1.1 CoreException()

```
Core::CoreException::CoreException (
    const std::string & message ) [inline]
```

[CoreException](#) constructor.

Author

Louis

Parameters

<i>message</i>	
----------------	--

4.3.2 Member Function Documentation

4.3.2.1 what()

```
const char* Core::CoreException::what ( ) const [inline], [override], [noexcept]
```

what function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

const char *

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

- [src/core/Core.hpp](#)

4.4 Entity Class Reference

Public Member Functions

- [Entity](#) ()

- *Entity constructor.*
• [Entity](#) (EntityType)
- *Entity constructor.*
• [Entity](#) (EntityType, std::vector< float >)
- *Entity constructor.*
• [~Entity](#) ()
- *Entity destructor.*
• void [setProperty](#) (Property, int)
setProperty function
- void [setProperty](#) (Property, float)
setProperty function
- void [setProperty](#) (Property, std::vector< float >)
setProperty function
- void [setProperty](#) (Property, std::vector< int >)
setProperty function
- std::vector< float > [getProperty](#) (Property)
getProperty function
- std::map< Property, std::vector< float > > [getProperties](#) ()
getProperties function
- EntityType [getType](#) ()
getType function
- Name [getName](#) ()
getName function
- void [setName](#) (Name)
setName function
- std::string * [getSpritePath](#) () const
getSpritePath function
- void [setSpritePath](#) (std::string *spritePath)
setSpritePath function
- char [getSpriteChar](#) () const
getSpriteChar function
- void [setSpriteChar](#) (char spriteChar)
setSpriteChar function

Protected Attributes

- std::map< Property, std::vector< float > > **_properties**
- EntityType **_type**
- Name **_name**
- void * **_clickAction**
- std::string * **_spritePath**
- char **_spriteChar**

4.4.1 Constructor & Destructor Documentation

4.4.1.1 Entity() [1/3]

```
Entity::Entity ( )
```

[Entity](#) constructor.

Author

Louis

Parameters

<i>void</i>	
-------------	--

4.4.1.2 Entity() [2/3]

```
Entity::Entity (
    EntityType type )
```

[Entity](#) constructor.

Author

Louis

Parameters

<i>EntityType</i>	
-------------------	--

4.4.1.3 Entity() [3/3]

```
Entity::Entity (
    EntityType type,
    std::vector< float > position )
```

[Entity](#) constructor.

Author

Louis

Parameters

<i>EntityType</i>	
<i>std::vector<float></i>	value

4.4.1.4 ~Entity()

```
Entity::~~Entity ( )
```

[Entity](#) destructor.

Author

Louis

Parameters

<i>void</i>	
-------------	--

4.4.2 Member Function Documentation

4.4.2.1 getName()

```
Name Entity::getName ( )
```

getName function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

Name

4.4.2.2 getProperties()

```
std::map< Property, std::vector< float > > Entity::getProperties ( )
```

getProperties function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

`std::map<Property, std::vector<float>>`

4.4.2.3 getProperty()

```
std::vector< float > Entity::getProperty (
    Property property )
```

getProperty function

Author

Louis

Parameters

<i>Property</i>	property
-----------------	----------

Returns

`std::vector<float>`

4.4.2.4 getSpriteChar()

```
char Entity::getSpriteChar ( ) const
```

getSpriteChar function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

char

4.4.2.5 getSpritePath()

```
std::string * Entity::getSpritePath ( ) const
```

getSpritePath function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::string *

4.4.2.6 getType()

```
EntityType Entity::getType ( )
```

getType function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

EntityType

4.4.2.7 setName()

```
void Entity::setName (
    Name name )
```

setName function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

void

4.4.2.8 setProperty() [1/4]

```
void Entity::setProperty (
    Property property,
    float value )
```

setProperty function

Author

Louis

Parameters

<i>Property</i>	property
<i>float</i>	value

Returns

void

4.4.2.9 setProperty() [2/4]

```
void Entity::setProperty (
    Property property,
    int value )
```

setProperty function

Author

Louis

Parameters

<i>Property</i>	property
<i>int</i>	value

Returns

void

4.4.2.10 setProperty() [3/4]

```
void Entity::setProperty (
    Property property,
    std::vector< float > value )
```

setProperty function

Parameters

<i>Property</i>	property
<i>std::vector<float></i>	value

Returns

void

4.4.2.11 setProperty() [4/4]

```
void Entity::setProperty (
    Property property,
    std::vector< int > value )
```

setProperty function

Parameters

<i>Property</i>	property
<i>std::vector<int></i>	value

Returns

void

4.4.2.12 setSpriteChar()

```
void Entity::setSpriteChar (
    char spriteChar )
```

setSpriteChar function

Author

Louis

Parameters

<i>char</i>	<i>spriteChar</i>
-------------	-------------------

Returns

void

4.4.2.13 setSpritePath()

```
void Entity::setSpritePath (
    std::string * spritePath )
```

setSpritePath function

Author

Louis

Parameters

<i>std::string</i>	<i>*spritePath</i>
--------------------	--------------------

Returns

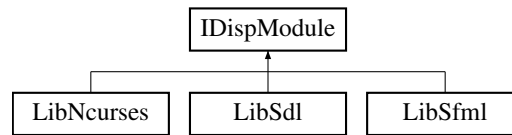
void

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

- src/lib/games/Entity.hpp
- src/lib/games/Entity.cpp

4.5 IDispModule Class Reference

Inheritance diagram for IDispModule:



Public Member Functions

- virtual bool `initScreen` ()=0
initScreen function
- virtual bool `destroyScreen` ()=0
destroyScreen function
- virtual bool `display` ()=0
display function
- virtual Key `getUserInput` ()=0
getUserInput function
- virtual void `setUserInput` (Key)=0
setUserInput function
- virtual bool `drawEntity` (Entity *)=0
drawEntity function
- virtual bool `drawEntity` (std::vector< Entity * >)=0
drawEntity function
- virtual bool `drawProp` (Prop *)=0
drawProp function
- virtual bool `drawProp` (std::vector< Prop * >)=0
drawProp function
- virtual bool `drawText` (Text *)=0
drawText function
- virtual bool `drawText` (std::vector< Text * >)=0
drawText function
- virtual bool `clearAll` ()=0
clearAll function
- virtual bool `clearEntity` ()=0
clearEntity function
- virtual bool `clearEntity` (Id)=0
clearEntity function
- virtual bool `clearEntity` (std::vector< Id >)=0
clearEntity function
- virtual bool `clearProp` (Id)=0
clearProp function
- virtual bool `clearProp` (std::vector< Id >)=0
clearProp function
- virtual bool `clearText` (Id)=0
clearText function
- virtual bool `clearText` (std::vector< Id >)=0
clearText function

- virtual bool `addText (Text *)=0`
addText function
- virtual bool `addEntity (Entity *)=0`
addEntity function
- virtual bool `addProp (Prop *)=0`
addProp function
- virtual bool `update ()=0`
update function
- virtual bool `updateEntity (Id, Entity *)=0`
updateEntity function
- virtual bool `updateEntity (std::vector< std::pair< Id, Entity * >>)=0`
updateEntity function
- virtual std::vector< Entity * > `getEntities ()=0`
getEntities function
- virtual bool `updateProp (Id, Prop *)=0`
updateProp function
- virtual bool `updateProp (std::vector< std::pair< Id, Prop * >>)=0`
updateProp function
- virtual bool `updateText (Id, Text *)=0`
updateText function
- virtual bool `updateText (std::vector< std::pair< Id, Text * >>)=0`
updateText function
- virtual bool `displayError ()=0`
displayError function
- virtual bool `sceneSwitch ()=0`
sceneSwitch function
- virtual int `getFPS ()=0`
getFPS function
- virtual bool `debug ()=0`
debug function
- virtual std::vector< float > `getRes ()=0`
getRes function
- virtual std::vector< float > `getSize ()=0`
getSize function
- virtual bool `changeScore (int add)=0`
changeScore function
- virtual int `getScore ()=0`
getScore function
- virtual bool `setScore (int score)=0`
setScore function
- virtual bool `writeScore ()=0`
writeScore function

4.5.1 Member Function Documentation

4.5.1.1 addEntity()

```
virtual bool IDispModule::addEntity (
    Entity * ) [pure virtual]
```

addEntity function

Author

Louis

Parameters

<i>Entity</i>	*entity
---------------	---------

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.2 addProp()

```
virtual bool IDispModule::addProp (
    Prop * ) [pure virtual]
```

addProp function

Author

Louis

Parameters

<i>Prop</i>	*prop
-------------	-------

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.3 addText()

```
virtual bool IDispModule::addText (
    Text * ) [pure virtual]
```

addText function

Author

Louis

Parameters

<i>Text</i>	*text
-------------	-------

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).**4.5.1.4 changeScore()**

```
virtual bool IDispModule::changeScore (
    int add ) [pure virtual]
```

changeScore function

Author

Louis

Parameters

<i>int</i>	add
------------	-----

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).**4.5.1.5 clearAll()**

```
virtual bool IDispModule::clearAll ( ) [pure virtual]
```

clearAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.6 clearEntity() [1/3]

```
virtual bool IDispModule::clearEntity ( ) [pure virtual]
```

clearEntity function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.7 clearEntity() [2/3]

```
virtual bool IDispModule::clearEntity (
    Id ) [pure virtual]
```

clearEntity function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.8 clearEntity() [3/3]

```
virtual bool IDispModule::clearEntity (
    std::vector< Id > ) [pure virtual]
```

clearEntity function

Author

Louis

Parameters

<i>std::vector<Id></i>	ids
------------------------------	-----

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.9 clearProp() [1/2]

```
virtual bool IDispModule::clearProp (
    Id ) [pure virtual]
```

clearProp function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.10 clearProp() [2/2]

```
virtual bool IDispModule::clearProp (
    std::vector< Id > ) [pure virtual]
```

clearProp function

Author

Louis

Parameters

<i>std::vector<Id></i>	ids
------------------------------	-----

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.11 clearText() [1/2]

```
virtual bool IDispModule::clearText (
    Id ) [pure virtual]
```

clearText function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.12 clearText() [2/2]

```
virtual bool IDispModule::clearText (
    std::vector< Id > ) [pure virtual]
```

clearText function

Author

Louis

Parameters

<i>std::vector<Id></i>	ids
------------------------------	-----

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.13 debug()

```
virtual bool IDispModule::debug ( ) [pure virtual]
```

debug function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.14 destroyScreen()

```
virtual bool IDispModule::destroyScreen ( ) [pure virtual]
```

destroyScreen function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).**4.5.1.15 display()**

```
virtual bool IDispModule::display ( ) [pure virtual]
```

display function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).**4.5.1.16 displayError()**

```
virtual bool IDispModule::displayError ( ) [pure virtual]
```

displayError function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.17 drawEntity() [1/2]

```
virtual bool IDispModule::drawEntity (  
    Entity * ) [pure virtual]
```

drawEntity function

Author

Louis

Parameters

<i>Entity</i>	*entity
---------------	---------

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.18 drawEntity() [2/2]

```
virtual bool IDispModule::drawEntity (  
    std::vector< Entity * > ) [pure virtual]
```

drawEntity function

Author

Louis

Parameters

<code>std::vector<Entity</code>	<code>*> entities</code>
------------------------------------	-----------------------------

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.19 drawProp() [1/2]

```
virtual bool IDispModule::drawProp (  
    Prop * ) [pure virtual]
```

drawProp function

Author

Louis

Parameters

<code>Prop</code>	<code>*prop</code>
-------------------	--------------------

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.20 drawProp() [2/2]

```
virtual bool IDispModule::drawProp (  
    std::vector< Prop * > ) [pure virtual]
```

drawProp function

Author

Louis

Parameters

<code>std::vector<Prop</code>	<code>*> props</code>
----------------------------------	--------------------------

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.21 drawText() [1/2]

```
virtual bool IDispModule::drawText (
    std::vector< Text * > ) [pure virtual]
```

drawText function

Author

Louis

Parameters

<code>std::vector< Text</code>	<code>*> texts</code>
---	--------------------------

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.22 drawText() [2/2]

```
virtual bool IDispModule::drawText (
    Text * ) [pure virtual]
```

drawText function

Author

Louis

Parameters

<code>Text</code>	<code>*text</code>
-----------------------------------	--------------------

Returns

bool

Implemented in [LibNcurses](#), [LibSfml](#), and [LibSdl](#).

4.5.1.23 getEntities()

```
virtual std::vector<Entity *> IDispModule::getEntities ( ) [pure virtual]
```

getEntities function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Entity *>

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.24 getFPS()

```
virtual int IDispModule::getFPS ( ) [pure virtual]
```

getFPS function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

int

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.25 getRes()

```
virtual std::vector<float> IDispModule::getRes ( ) [pure virtual]
```

getRes function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<float>

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.26 getScore()

```
virtual int IDispModule::getScore ( ) [pure virtual]
```

getScore function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

int

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.27 getSize()

```
virtual std::vector<float> IDispModule::getSize ( ) [pure virtual]
```

getSize function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<float>

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).**4.5.1.28 getUserInput()**

```
virtual Key IDispModule::getUserInput ( ) [pure virtual]
```

getUserInput function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

Key

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).**4.5.1.29 initScreen()**

```
virtual bool IDispModule::initScreen ( ) [pure virtual]
```

initScreen function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.30 sceneSwitch()

```
virtual bool IDispModule::sceneSwitch ( ) [pure virtual]
```

sceneSwitch function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.31 setScore()

```
virtual bool IDispModule::setScore (
    int score ) [pure virtual]
```

setScore function

Author

Louis

Parameters

<i>int</i>	score
------------	-------

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.32 setUserInput()

```
virtual void IDispModule::setUserInput (
    Key ) [pure virtual]
```

setUserInput function

Author

Louis

Parameters

<i>Key</i>	
------------	--

Returns

void

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.33 update()

```
virtual bool IDispModule::update ( ) [pure virtual]
```

update function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.34 updateEntity() [1/2]

```
virtual bool IDispModule::updateEntity (
    Id ,
    Entity * ) [pure virtual]
```

updateEntity function

Author

Louis

Parameters

<i>Id</i>	id
<i>Entity</i>	*entity

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.35 updateEntity() [2/2]

```
virtual bool IDispModule::updateEntity (
    std::vector< std::pair< Id, Entity * >> ) [pure virtual]
```

updateEntity function

Author

Louis

Parameters

<i>std::vector< std::pair< Id, Entity * >> entities</i>

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.36 updateProp() [1/2]

```
virtual bool IDispModule::updateProp (
    Id ,
    Prop * ) [pure virtual]
```

updateProp function

Author

Louis

Parameters

<i>Id</i>	id
<i>Prop</i>	*prop

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.37 updateProp() [2/2]

```
virtual bool IDispModule::updateProp (
    std::vector< std::pair< Id, Prop * >> ) [pure virtual]
```

updateProp function

Author

Louis

Parameters

<i>std::vector<std::pair<Id,Prop</i>	<i>*>> props</i>
--	------------------------

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.38 updateText() [1/2]

```
virtual bool IDispModule::updateText (
    Id ,
    Text * ) [pure virtual]
```

updateText function

Author

Louis

Parameters

<i>Id</i>	id
<i>Text</i>	*text

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.39 updateText() [2/2]

```
virtual bool IDispModule::updateText (
    std::vector< std::pair< Id, Text * >> ) [pure virtual]
```

updateText function

Author

Louis

Parameters

<i>std::vector< std::pair< Id, Text * >> texts</i>
--

Returns

bool

Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

4.5.1.40 writeScore()

```
virtual bool IDispModule::writeScore ( ) [pure virtual]
```

writeScore function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

bool

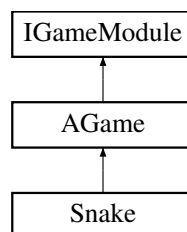
Implemented in [LibSfml](#), [LibSdl](#), and [LibNcurses](#).

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

- [src/lib/graphical/IDisplayModule.hpp](#)

4.6 IGameModule Class Reference

Inheritance diagram for IGameModule:



Public Member Functions

- virtual State [systemInit](#) ()=0
systemInit function
- virtual State [systemStart](#) ()=0
systemStart function
- virtual State [systemStop](#) ()=0
systemStop function
- virtual State [systemClear](#) ()=0
systemClear function
- virtual State [systemUpdate](#) ()=0
systemUpdate function

- virtual State [systemGetState](#) () const =0
systemGetState function
- virtual void [systemSetState](#) (State)=0
systemSetState function
- virtual void [systemOnUserInput](#) (int)=0
systemOnUserInput function
- virtual void [systemDebug](#) ()=0
systemDebug function
- virtual std::vector< [Entity](#) * > [entityGetAll](#) ()=0
entityGetAll function
- virtual [Entity](#) * [entityGet](#) (Id)=0
entityGet function
- virtual [Entity](#) * [entityGet](#) (Name)=0
entityGet function
- virtual std::vector< [Entity](#) * > [entityGetAllOfType](#) (EntityType)=0
entityGetAllOfType function
- virtual Id [entityGetId](#) (Name)=0
entityGetId function
- virtual Name [entityGetName](#) (Id)=0
entityGetName function
- virtual std::vector< float > [entityGetProperty](#) (Id, Property)=0
entityGetProperty function
- virtual bool [entityUpdate](#) (Id, Property, int)=0
entityUpdate function
- virtual bool [entityUpdate](#) (Id, Property, float)=0
entityUpdate function
- virtual bool [entityUpdate](#) (Id, Property, std::vector< float >)=0
entityUpdate function
- virtual bool [entityUpdate](#) (Id, Property, std::vector< int >)=0
entityUpdate function
- virtual bool [entityUpdate](#) (Id, Property, Name)=0
entityUpdate function
- virtual bool [entityPush](#) ([Entity](#))=0
entityPush function
- virtual bool [entityPush_front](#) ([Entity](#))=0
entityPush_front function
- virtual bool [entityRemove](#) (Id)=0
entityRemove function
- virtual bool [entityPop](#) ()=0
entityRemove function
- virtual bool [entityPop_front](#) ()=0
entityPop_front function
- virtual bool [entityClearAll](#) ()=0
entityClearAll function
- virtual std::vector< [Text](#) * > [textGetAll](#) ()=0
textGetAll function
- virtual std::vector< [Prop](#) * > [propGetAll](#) ()=0
propGetAll function
- virtual [Prop](#) [propGet](#) (Id)=0
propGet function
- virtual std::vector< [Prop](#) * > [propGetAllOfType](#) (PropType)=0

- propGetAllOfType function*
- virtual std::vector< float > [propGetProperty](#) (Id, Property)=0
- propGetProperty function*
- virtual bool [propUpdate](#) (Id, Property, int)=0
- propUpdate function*
- virtual bool [propUpdate](#) (Id, Property, float)=0
- propUpdate function*
- virtual bool [propUpdate](#) (Id, Property, std::vector< float >)=0
- propUpdate function*
- virtual bool [propUpdate](#) (Id, Property, std::vector< int >)=0
- propUpdate function*
- virtual bool [propUpdate](#) (Id, Property, Name)=0
- propUpdate function*
- virtual bool [propPush](#) (::Prop)=0
- propPush function*
- virtual bool [propPush_front](#) (::Prop)=0
- propPush_front function*
- virtual bool [propRemove](#) (Id)=0
- propRemove function*
- virtual bool [propPop](#) ()=0
- propPop function*
- virtual bool [propPop_front](#) ()=0
- propPop_front function*
- virtual bool [propClearAll](#) ()=0
- propClearAll function*
- virtual int [getScore](#) () const =0
- getScore function*
- virtual void [setScore](#) (int score)=0
- setScore function*

4.6.1 Member Function Documentation

4.6.1.1 entityClearAll()

```
virtual bool IGameModule::entityClearAll ( ) [pure virtual]
```

entityClearAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.2 entityGet() [1/2]

```
virtual ::Entity* IGameModule::entityGet (
    Id ) [pure virtual]
```

entityGet function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

[Entity](#) *

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.3 entityGet() [2/2]

```
virtual ::Entity* IGameModule::entityGet (
    Name ) [pure virtual]
```

entityGet function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

[Entity](#) *

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.4 entityGetAll()

```
virtual std::vector<Entity *> IGameModule::entityGetAll ( ) [pure virtual]
```

entityGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Entity *>

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.5 entityGetAllOfType()

```
virtual std::vector<::Entity*> IGameModule::entityGetAllOfType (
    EntityType ) [pure virtual]
```

entityGetAllOfType function

Author

Louis

Parameters

<i>EntityType</i>	type
-------------------	------

Returns

std::vector<Entity *>

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.6 entityGetId()

```
virtual Id IGameModule::entityGetId (
    Name ) [pure virtual]
```

entitygetId function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

Id id

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.7 entityGetName()

```
virtual Name IGameModule::entityGetName (
    Id ) [pure virtual]
```

entityGetName function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

Name name

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.8 entityGetProperty()

```
virtual std::vector<float> IGameModule::entityGetProperty (
    Id ,
    Property ) [pure virtual]
```

entityGetProperty function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property

Returns

int

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.9 entityPop()

```
virtual bool IGameModule::entityPop ( ) [pure virtual]
```

entityRemove function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

bool

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.10 entityPop_front()

```
virtual bool IGameModule::entityPop_front ( ) [pure virtual]
```

entityPop_front function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.11 entityPush()

```
virtual bool IGameModule::entityPush (  
    ::Entity ) [pure virtual]
```

entityPush function

Author

Louis

Parameters

Entity	entity
------------------------	--------

Returns

bool

4.6.1.12 entityPush_front()

```
virtual bool IGameModule::entityPush_front (  
    ::Entity ) [pure virtual]
```

entityPush_front function

Author

Louis

Parameters

Entity	entity
------------------------	--------

Returns

bool

4.6.1.13 entityRemove()

```
virtual bool IGameModule::entityRemove (
    Id ) [pure virtual]
```

entityRemove function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.14 entityUpdate() [1/5]

```
virtual bool IGameModule::entityUpdate (
    Id ,
    Property ,
    float ) [pure virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>float</i>	value

Returns

bool

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.15 entityUpdate() [2/5]

```
virtual bool IGameModule::entityUpdate (
    Id ,
    Property ,
    int ) [pure virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>int</i>	value

Returns

bool

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.16 entityUpdate() [3/5]

```
virtual bool IGameModule::entityUpdate (
    Id ,
    Property ,
    Name ) [pure virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>Name</i>	name

Returns

bool

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.17 entityUpdate() [4/5]

```
virtual bool IGameModule::entityUpdate (
    Id ,
    Property ,
    std::vector< float > ) [pure virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<float></i>	value

Returns

bool

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.18 entityUpdate() [5/5]

```
virtual bool IGameModule::entityUpdate (
    Id ,
    Property ,
    std::vector< int > ) [pure virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<int></i>	value

Returns

bool

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.19 getScore()

```
virtual int IGameModule::getScore ( ) const [pure virtual]
```

getScore function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

int

Implemented in [Snake](#), [Pacman](#), [AGame](#), and [Menu](#).

4.6.1.20 propClearAll()

```
virtual bool IGameModule::propClearAll ( ) [pure virtual]
```

propClearAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implemented in [AGame](#).

4.6.1.21 propGet()

```
virtual ::Prop IGameModule::propGet (
    Id ) [pure virtual]
```

propGet function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

[Prop](#) *

Implemented in [AGame](#).

4.6.1.22 propGetAll()

```
virtual std::vector<::Prop *> IGameModule::propGetAll ( ) [pure virtual]
```

propGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

`std::vector<Prop *>`

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.23 propGetAllOfType()

```
virtual std::vector<::Prop *> IGameModule::propGetAllOfType (
    PropType ) [pure virtual]
```

propGetAllOfType function

Author

Louis

Parameters

<i>PropType</i>	type
-----------------	------

Returns

`std::vector<Prop *>`

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.24 propGetProperty()

```
virtual std::vector<float> IGameModule::propGetProperty (
    Id ,
    Property ) [pure virtual]
```

propGetProperty function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property

Returns

`std::vector<float>`

Implemented in [AGame](#).

4.6.1.25 propPop()

```
virtual bool IGameModule::propPop ( ) [pure virtual]
```

propPop function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

`bool`

Implemented in [AGame](#).

4.6.1.26 propPop_front()

```
virtual bool IGameModule::propPop_front ( ) [pure virtual]
```

propPop_front function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

`bool`

Implemented in [AGame](#).

4.6.1.27 propPush()

```
virtual bool IGameModule::propPush (
    ::Prop ) [pure virtual]
```

propPush function

Author

Louis

Parameters

<i>Prop</i>	prop
-------------	------

Returns

bool

4.6.1.28 propPush_front()

```
virtual bool IGameModule::propPush_front (
    ::Prop ) [pure virtual]
```

propPush_front function

Author

Louis

Parameters

<i>Prop</i>	prop
-------------	------

Returns

bool

4.6.1.29 propRemove()

```
virtual bool IGameModule::propRemove (
    Id ) [pure virtual]
```

propRemove function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implemented in [AGame](#).

4.6.1.30 propUpdate() [1/5]

```
virtual bool IGameModule::propUpdate (  
    Id ,  
    Property ,  
    float ) [pure virtual]
```

propUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>float</i>	value

Implemented in [AGame](#).

4.6.1.31 propUpdate() [2/5]

```
virtual bool IGameModule::propUpdate (  
    Id ,  
    Property ,  
    int ) [pure virtual]
```

propUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>int</i>	value

Returns

bool

Implemented in [AGame](#).

4.6.1.32 propUpdate() [3/5]

```
virtual bool IGameModule::propUpdate (
    Id ,
    Property ,
    Name ) [pure virtual]
```

propUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>Name</i>	name

Returns

bool

Implemented in [AGame](#).

4.6.1.33 propUpdate() [4/5]

```
virtual bool IGameModule::propUpdate (
    Id ,
    Property ,
    std::vector< float > ) [pure virtual]
```

propUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<float></i>	value

Returns

bool

Implemented in [AGame](#).

4.6.1.34 propUpdate() [5/5]

```
virtual bool IGameModule::propUpdate (
    Id ,
    Property ,
    std::vector< int > ) [pure virtual]
```

propUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<int></i>	value

Returns

bool

Implemented in [AGame](#).

4.6.1.35 setScore()

```
virtual void IGameModule::setScore (
    int score ) [pure virtual]
```

setScore function

Author

Paul

Parameters

<i>int</i>	score
------------	-------

Returns

void

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.36 systemClear()

```
virtual State IGameModule::systemClear ( ) [pure virtual]
```

systemClear function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.37 systemDebug()

```
virtual void IGameModule::systemDebug ( ) [pure virtual]
```

systemDebug function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

void

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.38 systemGetState()

```
virtual State IGameModule::systemGetState ( ) const [pure virtual]
```

systemGetState function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.39 systemInit()

```
virtual State IGameModule::systemInit ( ) [pure virtual]
```

systemInit function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implemented in [Snake](#), [Pacman](#), [AGame](#), and [Menu](#).

4.6.1.40 systemOnUserInput()

```
virtual void IGameModule::systemOnUserInput (
    int ) [pure virtual]
```

systemOnUserInput function

Author

Louis

Parameters

<i>int</i>	input
------------	-------

Returns

void

Implemented in [Snake](#), [Pacman](#), [AGame](#), and [Menu](#).

4.6.1.41 systemSetState()

```
virtual void IGameModule::systemSetState (
    State ) [pure virtual]
```

systemSetState function

Author

Louis

Parameters

<i>State</i>	state
--------------	-------

Returns

void

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.42 systemStart()

```
virtual State IGameModule::systemStart ( ) [pure virtual]
```

systemStart function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.43 systemStop()

```
virtual State IGameModule::systemStop ( ) [pure virtual]
```

systemStop function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implemented in [Snake](#), [Pacman](#), [AGame](#), and [Menu](#).

4.6.1.44 systemUpdate()

```
virtual State IGameModule::systemUpdate ( ) [pure virtual]
```

systemUpdate function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implemented in [Snake](#), [Pacman](#), and [AGame](#).

4.6.1.45 textGetAll()

```
virtual std::vector<::Text *> IGameModule::textGetAll ( ) [pure virtual]
```

textGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Text *>

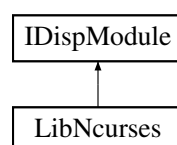
Implemented in [Snake](#), [Pacman](#), [AGame](#), and [Menu](#).

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

- [src/lib/games/IGameModule.hpp](#)

4.7 LibNcurses Class Reference

Inheritance diagram for LibNcurses:



Classes

- class [LibNcursesException](#)

Public Member Functions

- **LibNcurses** (int, int)
- bool [initScreen](#) () override
initScreen function
- bool [display](#) () override
display function
- Key [getUserInput](#) () override
getUserInput function
- void [setUserInput](#) (Key) override
setUserInput function
- bool [drawEntity](#) (Entity *) override
drawEntity function
- bool [drawEntity](#) (std::vector< Entity * >) override
drawEntity function
- bool [drawProp](#) (Prop *) override
drawProp function
- bool [drawProp](#) (std::vector< Prop * >) override
drawProp function
- bool [drawText](#) (Text *) override
drawText function
- bool [drawText](#) (std::vector< Text * >) override
drawText function
- bool [clearAll](#) () override
clearAll function
- bool [clearEntity](#) () override
clearEntity function
- bool [clearEntity](#) (Id) override
clearEntity function
- bool [clearEntity](#) (std::vector< Id >) override
clearEntity function
- bool [clearProp](#) (Id) override
clearProp function
- bool [clearProp](#) (std::vector< Id >) override
clearProp function
- bool [clearText](#) (Id) override
clearText function
- bool [clearText](#) (std::vector< Id >) override
clearText function
- bool [addText](#) (Text *) override
addText function
- bool [addEntity](#) (Entity *) override
addEntity function
- bool [addProp](#) (Prop *) override
addProp function
- bool [changeScore](#) (int add) override

- changeScore function*
- int **getScore** () override
- getScore function*
- bool **setScore** (int score) override
- setScore function*
- bool **writeScore** () override
- writeScore function*
- bool **destroyScreen** () override
- destroyScreen function*
- bool **update** () override
- update function*
- bool **updateEntity** (Id, Entity *) override
- updateEntity function*
- bool **updateEntity** (std::vector< std::pair< Id, Entity * >>) override
- updateEntity function*
- std::vector< Entity * > **getEntities** () override
- getEntities function*
- bool **updateProp** (Id, Prop *) override
- updateProp function*
- bool **updateProp** (std::vector< std::pair< Id, Prop * >>) override
- updateProp function*
- bool **updateText** (Id, Text *) override
- updateText function*
- bool **updateText** (std::vector< std::pair< Id, Text * >>) override
- updateText function*
- bool **displayError** () override
- displayError function*
- bool **sceneSwitch** () override
- sceneSwitch function*
- int **getFPS** () override
- getFPS function*
- void **setKey** ()
- bool **debug** () override
- debug function*
- std::vector< float > **getRes** () override
- getRes function*
- std::vector< float > **getSize** () override
- getSize function*

Protected Attributes

- int **_x**
- int **_y**
- std::vector< Entity * > **_entities**
- std::vector< Prop * > **_props**
- std::vector< Text * > **_texts**
- WINDOW * **_win**
- Key **_key**
- int **_score**

4.7.1 Member Function Documentation

4.7.1.1 addEntity()

```
bool LibNcurses::addEntity (
    Entity * ) [override], [virtual]
```

addEntity function

Author

Louis

Parameters

<i>Entity</i>	*entity
---------------	---------

Returns

bool

Implements [IDispModule](#).

4.7.1.2 addProp()

```
bool LibNcurses::addProp (
    Prop * ) [override], [virtual]
```

addProp function

Author

Louis

Parameters

<i>Prop</i>	*prop
-------------	-------

Returns

bool

Implements [IDispModule](#).

4.7.1.3 addText()

```
bool LibNcurses::addText (
    Text * ) [override], [virtual]
```

addText function

Author

Louis

Parameters

Text	*text
----------------------	-------

Returns

bool

Implements [IDispModule](#).

4.7.1.4 changeScore()

```
bool LibNcurses::changeScore (
    int add ) [override], [virtual]
```

changeScore function

Author

Louis

Parameters

<i>int</i>	add
------------	-----

Returns

bool

Implements [IDispModule](#).

4.7.1.5 clearAll()

```
bool LibNcurses::clearAll ( ) [override], [virtual]
```

clearAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).**4.7.1.6 clearEntity()** [1/3]

```
bool LibNcurses::clearEntity ( ) [override], [virtual]
```

clearEntity function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).**4.7.1.7 clearEntity()** [2/3]

```
bool LibNcurses::clearEntity (
    Id ) [override], [virtual]
```

clearEntity function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IDispModule](#).

4.7.1.8 clearEntity() [3/3]

```
bool LibNcurses::clearEntity (
    std::vector< Id > ) [override], [virtual]
```

clearEntity function

Author

Louis

Parameters

<i>std::vector<Id></i>	ids
------------------------------	-----

Returns

bool

Implements [IDispModule](#).

4.7.1.9 clearProp() [1/2]

```
bool LibNcurses::clearProp (
    Id ) [override], [virtual]
```

clearProp function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IDispModule](#).**4.7.1.10 clearProp() [2/2]**

```
bool LibNcurses::clearProp (
    std::vector< Id > ) [override], [virtual]
```

clearProp function

Author

Louis

Parameters

<i>std::vector<Id></i>	ids
------------------------------	-----

Returns

bool

Implements [IDispModule](#).**4.7.1.11 clearText() [1/2]**

```
bool LibNcurses::clearText (
    Id ) [override], [virtual]
```

clearText function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IDispModule](#).

4.7.1.12 clearText() [2/2]

```
bool LibNcurses::clearText (
    std::vector< Id > ) [override], [virtual]
```

clearText function

Author

Louis

Parameters

<i>std::vector<Id></i>	ids
------------------------------	-----

Returns

bool

Implements [IDispModule](#).

4.7.1.13 debug()

```
bool LibNcurses::debug ( ) [override], [virtual]
```

debug function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.7.1.14 destroyScreen()

```
bool LibNcurses::destroyScreen ( ) [override], [virtual]
```

destroyScreen function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.7.1.15 display()

```
bool LibNcurses::display ( ) [override], [virtual]
```

display function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.7.1.16 displayError()

```
bool LibNcurses::displayError ( ) [override], [virtual]
```

displayError function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).**4.7.1.17 drawEntity() [1/2]**

```
bool LibNcurses::drawEntity (  
    Entity * ) [override], [virtual]
```

drawEntity function

Author

Louis

Parameters

Entity	*entity
------------------------	---------

Returns

bool

Implements [IDispModule](#).**4.7.1.18 drawEntity() [2/2]**

```
bool LibNcurses::drawEntity (  
    std::vector< Entity * > ) [override], [virtual]
```

drawEntity function

Author

Louis

Parameters

<code>std::vector<Entity</code>	<code>*> entities</code>
------------------------------------	-----------------------------

Returns

bool

Implements [IDispModule](#).

4.7.1.19 drawProp() [1/2]

```
bool LibNcurses::drawProp (  
    Prop * ) [override], [virtual]
```

drawProp function

Author

Louis

Parameters

Prop	*prop
----------------------	-------

Returns

bool

Implements [IDispModule](#).

4.7.1.20 drawProp() [2/2]

```
bool LibNcurses::drawProp (  
    std::vector< Prop * > ) [override], [virtual]
```

drawProp function

Author

Louis

Parameters

<code>std::vector<Prop</code>	<code>*> props</code>
----------------------------------	--------------------------

Returns

bool

Implements [IDispModule](#).**4.7.1.21 drawText() [1/2]**

```
bool LibNcurses::drawText (
    std::vector< Text * > ) [override], [virtual]
```

drawText function

Author

Louis

Parameters

<code>std::vector< Text</code>	<code>*> texts</code>
---	--------------------------

Returns

bool

Implements [IDispModule](#).**4.7.1.22 drawText() [2/2]**

```
bool LibNcurses::drawText (
    Text * ) [override], [virtual]
```

drawText function

Author

Louis

Parameters

<code>Text</code>	<code>*text</code>
-----------------------------------	--------------------

Returns

bool

Implements [IDispModule](#).

4.7.1.23 getEntities()

```
std::vector< Entity * > LibNcurses::getEntities ( ) [override], [virtual]
```

getEntities function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Entity *>

Implements [IDispModule](#).

4.7.1.24 getFPS()

```
int LibNcurses::getFPS ( ) [override], [virtual]
```

getFPS function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

int

Implements [IDispModule](#).

4.7.1.25 getRes()

```
std::vector< float > LibNcurses::getRes ( ) [override], [virtual]
```

getRes function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<float>

Implements [IDispModule](#).

4.7.1.26 getScore()

```
int LibNcurses::getScore ( ) [override], [virtual]
```

getScore function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

int

Implements [IDispModule](#).

4.7.1.27 getSize()

```
std::vector< float > LibNcurses::getSize ( ) [override], [virtual]
```

getSize function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<float>

Implements [IDispModule](#).**4.7.1.28 getUserInput()**

```
Key LibNcurses::getUserInput ( ) [override], [virtual]
```

getUserInput function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

Key

Implements [IDispModule](#).**4.7.1.29 initScreen()**

```
bool LibNcurses::initScreen ( ) [override], [virtual]
```

initScreen function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.7.1.30 sceneSwitch()

```
bool LibNcurses::sceneSwitch ( ) [override], [virtual]
```

sceneSwitch function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.7.1.31 setScore()

```
bool LibNcurses::setScore (
    int score ) [override], [virtual]
```

setScore function

Author

Louis

Parameters

<i>int</i>	score
------------	-------

Returns

bool

Implements [IDispModule](#).

4.7.1.32 setUserInput()

```
void LibNcurses::setUserInput (
    Key ) [override], [virtual]
```

setUserInput function

Author

Louis

Parameters

<i>Key</i>	
------------	--

Returns

void

Implements [IDispModule](#).

4.7.1.33 update()

```
bool LibNcurses::update ( ) [override], [virtual]
```

update function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.7.1.34 updateEntity() [1/2]

```
bool LibNcurses::updateEntity (
    Id ,
    Entity * ) [override], [virtual]
```

updateEntity function

Author

Louis

Parameters

<i>Id</i>	id
<i>Entity</i>	*entity

Returns

bool

Implements [IDispModule](#).

4.7.1.35 updateEntity() [2/2]

```
bool LibNcurses::updateEntity (
    std::vector< std::pair< Id, Entity * >> ) [override], [virtual]
```

updateEntity function

Author

Louis

Parameters

<i>std::vector< std::pair< Id, Entity * >> entities</i>

Returns

bool

Implements [IDispModule](#).

4.7.1.36 updateProp() [1/2]

```
bool LibNcurses::updateProp (
    Id ,
    Prop * ) [override], [virtual]
```

updateProp function

Author

Louis

Parameters

<i>Id</i>	id
<i>Prop</i>	*prop

Returns

bool

Implements [IDispModule](#).

4.7.1.37 updateProp() [2/2]

```
bool LibNcurses::updateProp (
    std::vector< std::pair< Id, Prop * >> ) [override], [virtual]
```

updateProp function

Author

Louis

Parameters

<i>std::vector<std::pair<Id,Prop</i>	<i>*>> props</i>
--	------------------------

Returns

bool

Implements [IDispModule](#).

4.7.1.38 updateText() [1/2]

```
bool LibNcurses::updateText (
    Id ,
    Text * ) [override], [virtual]
```

updateText function

Author

Louis

Parameters

<i>Id</i>	id
<i>Text</i>	*text

Returns

bool

Implements [IDispModule](#).

4.7.1.39 updateText() [2/2]

```
bool LibNcurses::updateText (
    std::vector< std::pair< Id, Text * >> ) [override], [virtual]
```

updateText function

Author

Louis

Parameters

<i>std::vector< std::pair< Id, Text * >> texts</i>
--

Returns

bool

Implements [IDispModule](#).

4.7.1.40 writeScore()

```
bool LibNcurses::writeScore ( ) [override], [virtual]
```

writeScore function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

bool

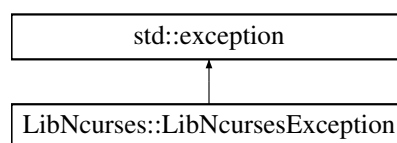
Implements [IDispModule](#).

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

- src/lib/graphical/Ncurses/LibNcurses.hpp
- src/lib/graphical/Ncurses/LibNcurses.cpp

4.8 LibNcurses::LibNcursesException Class Reference

Inheritance diagram for LibNcurses::LibNcursesException:



Public Member Functions

- [LibNcursesException](#) (const std::string &message)
LibNcursesException constructor.
- const char * [what](#) () const noexcept override
what function

4.8.1 Constructor & Destructor Documentation

4.8.1.1 LibNcursesException()

```
LibNcurses::LibNcursesException::LibNcursesException (
    const std::string & message ) [explicit]
```

[LibNcursesException](#) constructor.

Constructor of the [LibNcursesException](#) class.

Author

Zelie

Parameters

<i>std::string</i>	&message
<i>message</i>	The exception message
<i>component</i>	The component that throw the exception

4.8.2 Member Function Documentation

4.8.2.1 what()

```
const char * LibNcurses::LibNcursesException::what ( ) const [override], [noexcept]
```

what function

Return the exception message.

Author

Zelie

Parameters

<i>void</i>	
-------------	--

Returns

const char *

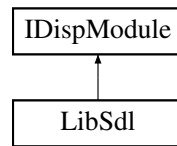
The exception message

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

- src/lib/graphical/Ncurses/LibNcurses.hpp
- src/lib/graphical/Ncurses/LibNcurses.cpp

4.9 LibSdl Class Reference

Inheritance diagram for LibSdl:



Classes

- class [LibSdlException](#)

Public Types

- enum **Color** {
RED = 0xFF0000 , **GREEN** = 0x00FF00 , **BLUE** = 0x0000FF , **YELLOW** = 0xFFFF00 ,
CYAN = 0x00FFFF , **MAGENTA** = 0xFF00FF , **BLACK** = 0x000000 , **WHITE** = 0xFFFFFFFF }

Public Member Functions

- bool [initScreen](#) () override
initScreen function
- bool [display](#) () override
display function
- bool [destroyScreen](#) () override
destroyScreen function
- Key [getUserInput](#) () override
getUserInput function
- void [setUserInput](#) (Key) override
setUserInput function
- bool [drawEntity](#) (Entity *) override
drawEntity function
- bool [drawEntity](#) (std::vector< Entity * >) override
drawEntity function
- bool [drawProp](#) (Prop *) override
drawProp function
- bool [drawProp](#) (std::vector< Prop * >) override
drawProp function
- bool [drawText](#) (Text *)
drawText function
- bool [drawText](#) (std::vector< Text * >) override
drawText function
- bool [clearAll](#) () override
clearAll function
- bool [clearEntity](#) () override
clearEntity function
- bool [clearEntity](#) (Id) override

- clearEntity function*
- bool [clearEntity](#) (std::vector< Id >) override
- clearEntity function*
- bool [clearProp](#) (Id) override
- clearProp function*
- bool [clearProp](#) (std::vector< Id >) override
- clearProp function*
- bool [clearText](#) (Id) override
- clearText function*
- bool [clearText](#) (std::vector< Id >) override
- clearText function*
- bool [addText](#) (Text *) override
- addText function*
- bool [addEntity](#) (Entity *) override
- addEntity function*
- bool [addProp](#) (Prop *) override
- addProp function*
- bool [changeScore](#) (int add) override
- changeScore function*
- int [getScore](#) () override
- getScore function*
- bool [setScore](#) (int score) override
- setScore function*
- bool [writeScore](#) () override
- writeScore function*
- bool [update](#) () override
- update function*
- bool [updateEntity](#) (Id, Entity *) override
- updateEntity function*
- bool [updateEntity](#) (std::vector< std::pair< Id, Entity * >>) override
- updateEntity function*
- std::vector< Entity * > [getEntities](#) () override
- getEntities function*
- bool [updateProp](#) (Id, Prop *) override
- updateProp function*
- bool [updateProp](#) (std::vector< std::pair< Id, Prop * >>) override
- updateProp function*
- bool [updateText](#) (Id, Text *) override
- updateText function*
- bool [updateText](#) (std::vector< std::pair< Id, Text * >>) override
- updateText function*
- bool [displayError](#) () override
- displayError function*
- bool [sceneSwitch](#) () override
- sceneSwitch function*
- int [getFPS](#) () override
- getFPS function*
- bool [debug](#) () override
- debug function*
- std::vector< float > [getRes](#) () override
- getRes function*
- std::vector< float > [getSize](#) () override
- getSize function*

4.9.1 Member Function Documentation

4.9.1.1 addEntity()

```
bool LibSdl::addEntity (
    Entity * ) [override], [virtual]
```

addEntity function

Author

Louis

Parameters

<i>Entity</i>	*entity
---------------	---------

Returns

bool

Implements [IDispModule](#).

4.9.1.2 addProp()

```
bool LibSdl::addProp (
    Prop * ) [override], [virtual]
```

addProp function

Author

Louis

Parameters

<i>Prop</i>	*prop
-------------	-------

Returns

bool

Implements [IDispModule](#).

4.9.1.3 addText()

```
bool LibSdl::addText (
    Text * ) [override], [virtual]
```

addText function

Author

Louis

Parameters

<i>Text</i>	*text
-------------	-------

Returns

bool

Implements [IDispModule](#).

4.9.1.4 changeScore()

```
bool LibSdl::changeScore (
    int add ) [override], [virtual]
```

changeScore function

Author

Louis

Parameters

<i>int</i>	add
------------	-----

Returns

bool

Implements [IDispModule](#).

4.9.1.5 clearAll()

```
bool LibSdl::clearAll ( ) [override], [virtual]
```

clearAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).**4.9.1.6 clearEntity()** [1/3]

```
bool LibSdl::clearEntity ( ) [override], [virtual]
```

clearEntity function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).**4.9.1.7 clearEntity()** [2/3]

```
bool LibSdl::clearEntity (
    Id ) [override], [virtual]
```

clearEntity function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IDispModule](#).

4.9.1.8 clearEntity() [3/3]

```
bool LibSdl::clearEntity (
    std::vector< Id > ) [override], [virtual]
```

clearEntity function

Author

Louis

Parameters

<i>std::vector<Id></i>	ids
------------------------------	-----

Returns

bool

Implements [IDispModule](#).

4.9.1.9 clearProp() [1/2]

```
bool LibSdl::clearProp (
    Id ) [override], [virtual]
```

clearProp function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IDispModule](#).**4.9.1.10 clearProp() [2/2]**

```
bool LibSdl::clearProp (
    std::vector< Id > ) [override], [virtual]
```

clearProp function

Author

Louis

Parameters

<i>std::vector<Id></i>	ids
------------------------------	-----

Returns

bool

Implements [IDispModule](#).**4.9.1.11 clearText() [1/2]**

```
bool LibSdl::clearText (
    Id ) [override], [virtual]
```

clearText function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IDispModule](#).

4.9.1.12 clearText() [2/2]

```
bool LibSdl::clearText (
    std::vector< Id > ) [override], [virtual]
```

clearText function

Author

Louis

Parameters

<i>std::vector<Id></i>	ids
------------------------------	-----

Returns

bool

Implements [IDispModule](#).

4.9.1.13 debug()

```
bool LibSdl::debug ( ) [override], [virtual]
```

debug function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.9.1.14 destroyScreen()

```
bool LibSdl::destroyScreen ( ) [inline], [override], [virtual]
```

destroyScreen function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.9.1.15 display()

```
bool LibSdl::display ( ) [override], [virtual]
```

display function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.9.1.16 displayError()

```
bool LibSdl::displayError ( ) [override], [virtual]
```

displayError function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).**4.9.1.17 drawEntity() [1/2]**

```
bool LibSdl::drawEntity (  
    Entity * ) [override], [virtual]
```

drawEntity function

Author

Louis

Parameters

Entity	*entity
------------------------	---------

Returns

bool

Implements [IDispModule](#).**4.9.1.18 drawEntity() [2/2]**

```
bool LibSdl::drawEntity (  
    std::vector< Entity * > ) [override], [virtual]
```

drawEntity function

Author

Louis

Parameters

<code>std::vector<Entity</code>	<code>*> entities</code>
------------------------------------	-----------------------------

Returns

bool

Implements [IDispModule](#).

4.9.1.19 drawProp() [1/2]

```
bool LibSdl::drawProp (  
    Prop * ) [override], [virtual]
```

drawProp function

Author

Louis

Parameters

<code>Prop</code>	<code>*prop</code>
-------------------	--------------------

Returns

bool

Implements [IDispModule](#).

4.9.1.20 drawProp() [2/2]

```
bool LibSdl::drawProp (  
    std::vector< Prop * > ) [override], [virtual]
```

drawProp function

Author

Louis

Parameters

<code>std::vector<Prop</code>	<code>*> props</code>
----------------------------------	--------------------------

Returns

bool

Implements [IDispModule](#).

4.9.1.21 drawText() [1/2]

```
bool LibSdl::drawText (
    std::vector< Text * > ) [override], [virtual]
```

drawText function

Author

Louis

Parameters

<code>std::vector< Text</code>	<code>*> texts</code>
---	--------------------------

Returns

bool

Implements [IDispModule](#).

4.9.1.22 drawText() [2/2]

```
bool LibSdl::drawText (
    Text * ) [virtual]
```

drawText function

Author

Louis

Parameters

<code>Text</code>	<code>*text</code>
-----------------------------------	--------------------

Returns

bool

Implements [IDispModule](#).

4.9.1.23 getEntities()

```
std::vector< Entity * > LibSdl::getEntities ( ) [override], [virtual]
```

getEntities function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Entity *>

Implements [IDispModule](#).

4.9.1.24 getFPS()

```
int LibSdl::getFPS ( ) [override], [virtual]
```

getFPS function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

int

Implements [IDispModule](#).

4.9.1.25 getRes()

```
std::vector< float > LibSdl::getRes ( ) [override], [virtual]
```

getRes function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<float>

Implements [IDispModule](#).

4.9.1.26 getScore()

```
int LibSdl::getScore ( ) [override], [virtual]
```

getScore function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

int

Implements [IDispModule](#).

4.9.1.27 getSize()

```
std::vector< float > LibSdl::getSize ( ) [override], [virtual]
```

getSize function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<float>

Implements [IDispModule](#).**4.9.1.28 getUserInput()**

```
Key LibSdl::getUserInput ( ) [override], [virtual]
```

getUserInput function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

Key

Implements [IDispModule](#).**4.9.1.29 initScreen()**

```
bool LibSdl::initScreen ( ) [override], [virtual]
```

initScreen function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.9.1.30 sceneSwitch()

```
bool LibSdl::sceneSwitch ( ) [override], [virtual]
```

sceneSwitch function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.9.1.31 setScore()

```
bool LibSdl::setScore (
    int score ) [override], [virtual]
```

setScore function

Author

Louis

Parameters

<i>int</i>	score
------------	-------

Returns

bool

Implements [IDispModule](#).

4.9.1.32 setUserInput()

```
void LibSdl::setUserInput (
    Key ) [override], [virtual]
```

setUserInput function

Author

Louis

Parameters

<i>Key</i>	
------------	--

Returns

void

Implements [IDispModule](#).

4.9.1.33 update()

```
bool LibSdl::update ( ) [override], [virtual]
```

update function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.9.1.34 updateEntity() [1/2]

```
bool LibSdl::updateEntity (
    Id ,
    Entity * ) [override], [virtual]
```

updateEntity function

Author

Louis

Parameters

<i>Id</i>	id
<i>Entity</i>	*entity

Returns

bool

Implements [IDispModule](#).

4.9.1.35 updateEntity() [2/2]

```
bool LibSdl::updateEntity (
    std::vector< std::pair< Id, Entity * >> ) [override], [virtual]
```

updateEntity function

Author

Louis

Parameters

<i>std::vector< std::pair< Id, Entity * >> entities</i>

Returns

bool

Implements [IDispModule](#).

4.9.1.36 updateProp() [1/2]

```
bool LibSdl::updateProp (
    Id ,
    Prop * ) [override], [virtual]
```

updateProp function

Author

Louis

Parameters

<i>Id</i>	id
<i>Prop</i>	*prop

Returns

bool

Implements [IDispModule](#).

4.9.1.37 updateProp() [2/2]

```
bool LibSdl::updateProp (
    std::vector< std::pair< Id, Prop * >> ) [override], [virtual]
```

updateProp function

Author

Louis

Parameters

<i>std::vector<std::pair<Id,Prop</i>	<i>*>> props</i>
--	------------------------

Returns

bool

Implements [IDispModule](#).

4.9.1.38 updateText() [1/2]

```
bool LibSdl::updateText (
    Id ,
    Text * ) [override], [virtual]
```

updateText function

Author

Louis

Parameters

<i>Id</i>	id
<i>Text</i>	*text

Returns

bool

Implements [IDispModule](#).

4.9.1.39 updateText() [2/2]

```
bool LibSdl::updateText (
    std::vector< std::pair< Id, Text * >> ) [override], [virtual]
```

updateText function

Author

Louis

Parameters

<i>std::vector< std::pair< Id, Text * >> texts</i>
--

Returns

bool

Implements [IDispModule](#).

4.9.1.40 writeScore()

```
bool LibSdl::writeScore ( ) [override], [virtual]
```

writeScore function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

bool

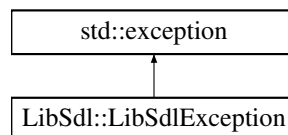
Implements [IDispModule](#).

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

- src/lib/graphical/SDL2/LibSDL.hpp
- src/lib/graphical/SDL2/LibSDL.cpp

4.10 LibSdl::LibSdlException Class Reference

Inheritance diagram for LibSdl::LibSdlException:



Public Member Functions

- [LibSdlException](#) (const std::string &message, const std::string &component="Unknown")
Constructor of the [LibSdlException](#) class.
- const char * [what](#) () const noexcept override
Return the exception message.

4.10.1 Constructor & Destructor Documentation

4.10.1.1 LibSdlException()

```
LibSdl::LibSdlException::LibSdlException (
    const std::string & message,
    const std::string & component = "Unknown" ) [explicit]
```

Constructor of the [LibSdlException](#) class.

Parameters

<i>message</i>	The exception message
<i>component</i>	The component that throw the exception

4.10.2 Member Function Documentation

4.10.2.1 what()

```
const char * LibSdl::LibSdlException::what ( ) const [override], [noexcept]
```

Return the exception message.

Returns

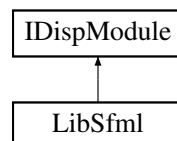
The exception message

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

- src/lib/graphical/SDL2/LibSDL.hpp
- src/lib/graphical/SDL2/LibSDL.cpp

4.11 LibSfml Class Reference

Inheritance diagram for LibSfml:



Classes

- class [LibSfmlException](#)

Public Member Functions

- bool [initScreen](#) () override
initScreen function
- bool [display](#) () override
display function
- bool [destroyScreen](#) () override
destroyScreen function
- Key [getUserInput](#) () override
getUserInput function
- void [setUserInput](#) (Key) override
setUserInput function
- bool [drawEntity](#) (Entity *) override
drawEntity function
- bool [drawEntity](#) (std::vector< Entity * >) override
drawEntity function
- bool [drawProp](#) (Prop *) override
drawProp function
- bool [drawProp](#) (std::vector< Prop * >) override
drawProp function
- bool [drawText](#) (Text *)
drawText function
- bool [drawText](#) (std::vector< Text * >) override
drawText function
- bool [clearAll](#) () override
clearAll function
- bool [clearEntity](#) () override
clearEntity function
- bool [clearEntity](#) (Id) override
clearEntity function
- bool [clearEntity](#) (std::vector< Id >) override
clearEntity function
- bool [clearProp](#) (Id) override
clearProp function
- bool [clearProp](#) (std::vector< Id >) override
clearProp function
- bool [clearText](#) (Id) override
clearText function
- bool [clearText](#) (std::vector< Id >) override
clearText function
- bool [addText](#) (Text *) override
addText function
- bool [addEntity](#) (Entity *) override
addEntity function
- bool [addProp](#) (Prop *) override
addProp function
- bool [changeScore](#) (int score) override
changeScore function
- int [getScore](#) () override
getScore function
- bool [setScore](#) (int score) override

- setScore function*
- bool [writeScore](#) () override
- writeScore function*
- bool [update](#) () override
- update function*
- bool [updateEntity](#) (Id, [Entity](#) *) override
- updateEntity function*
- bool [updateEntity](#) (std::vector< std::pair< Id, [Entity](#) * >>) override
- updateEntity function*
- std::vector< [Entity](#) * > [getEntities](#) () override
- getEntities function*
- bool [updateProp](#) (Id, [Prop](#) *) override
- updateProp function*
- bool [updateProp](#) (std::vector< std::pair< Id, [Prop](#) * >>) override
- updateProp function*
- bool [updateText](#) (Id, [Text](#) *) override
- updateText function*
- bool [updateText](#) (std::vector< std::pair< Id, [Text](#) * >>) override
- updateText function*
- bool [displayError](#) () override
- displayError function*
- bool [sceneSwitch](#) () override
- sceneSwitch function*
- int [getFPS](#) () override
- getFPS function*
- bool [debug](#) () override
- debug function*
- std::vector< float > [getRes](#) () override
- getRes function*
- std::vector< float > [getSize](#) () override
- getSize function*

4.11.1 Member Function Documentation

4.11.1.1 [addEntity\(\)](#)

```
bool LibSfml::addEntity (
    Entity * ) [override], [virtual]
```

[addEntity](#) function

Author

Louis

Parameters

<i>Entity</i>	*entity
---------------	---------

Returns

bool

Implements [IDispModule](#).

4.11.1.2 addProp()

```
bool LibSfml::addProp (
    Prop * ) [override], [virtual]
```

addProp function

Author

Louis

Parameters

<i>Prop</i>	*prop
-------------	-------

Returns

bool

Implements [IDispModule](#).

4.11.1.3 addText()

```
bool LibSfml::addText (
    Text * ) [override], [virtual]
```

addText function

Author

Louis

Parameters

<i>Text</i>	*text
-------------	-------

Returns

bool

Implements [IDispModule](#).

4.11.1.4 changeScore()

```
bool LibSfml::changeScore (
    int add ) [override], [virtual]
```

changeScore function

Author

Louis

Parameters

<i>int</i>	add
------------	-----

Returns

bool

Implements [IDispModule](#).

4.11.1.5 clearAll()

```
bool LibSfml::clearAll ( ) [override], [virtual]
```

clearAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.11.1.6 clearEntity() [1/3]

```
bool LibSfml::clearEntity ( ) [override], [virtual]
```

clearEntity function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.11.1.7 clearEntity() [2/3]

```
bool LibSfml::clearEntity (
    Id ) [override], [virtual]
```

clearEntity function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IDispModule](#).

4.11.1.8 clearEntity() [3/3]

```
bool LibSfml::clearEntity (
    std::vector< Id > ) [override], [virtual]
```

clearEntity function

Author

Louis

Parameters

<i>std::vector<Id></i>	ids
------------------------------	-----

Returns

bool

Implements [IDispModule](#).

4.11.1.9 clearProp() [1/2]

```
bool LibSfml::clearProp (
    Id ) [override], [virtual]
```

clearProp function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IDispModule](#).

4.11.1.10 clearProp() [2/2]

```
bool LibSfml::clearProp (
    std::vector< Id > ) [override], [virtual]
```

clearProp function

Author

Louis

Parameters

<code>std::vector<Id></code>	ids
------------------------------------	-----

Returns

bool

Implements [IDispModule](#).**4.11.1.11 clearText() [1/2]**

```
bool LibSfml::clearText (
    Id ) [override], [virtual]
```

clearText function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Implements [IDispModule](#).**4.11.1.12 clearText() [2/2]**

```
bool LibSfml::clearText (
    std::vector< Id > ) [override], [virtual]
```

clearText function

Author

Louis

Parameters

<code>std::vector<Id></code>	ids
------------------------------------	-----

Returns

bool

Implements [IDispModule](#).

4.11.1.13 debug()

```
bool LibSfml::debug ( ) [override], [virtual]
```

debug function

Author

Louis

Parameters

<code>void</code>	
-------------------	--

Returns

bool

Implements [IDispModule](#).

4.11.1.14 destroyScreen()

```
bool LibSfml::destroyScreen ( ) [inline], [override], [virtual]
```

destroyScreen function

Author

Louis

Parameters

<code>void</code>	
-------------------	--

Returns

bool

Implements [IDispModule](#).**4.11.1.15 display()**

```
bool LibSfml::display ( ) [override], [virtual]
```

display function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).**4.11.1.16 displayError()**

```
bool LibSfml::displayError ( ) [override], [virtual]
```

displayError function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.11.1.17 drawEntity() [1/2]

```
bool LibSfml::drawEntity (
    Entity * ) [override], [virtual]
```

drawEntity function

Author

Louis

Parameters

Entity	*entity
------------------------	---------

Returns

bool

Implements [IDispModule](#).

4.11.1.18 drawEntity() [2/2]

```
bool LibSfml::drawEntity (
    std::vector< Entity * > ) [override], [virtual]
```

drawEntity function

Author

Louis

Parameters

<i>std::vector<Entity</i>	<i>*> entities</i>
------------------------------	-----------------------

Returns

bool

Implements [IDispModule](#).

4.11.1.19 drawProp() [1/2]

```
bool LibSfml::drawProp (
    Prop * ) [override], [virtual]
```

drawProp function

Author

Louis

Parameters

<i>Prop</i>	*prop
-------------	-------

Returns

bool

Implements [IDispModule](#).**4.11.1.20 drawProp() [2/2]**

```
bool LibSfml::drawProp (
    std::vector< Prop * > ) [override], [virtual]
```

drawProp function

Author

Louis

Parameters

<i>std::vector<Prop</i>	<i>*> props</i>
----------------------------	--------------------

Returns

bool

Implements [IDispModule](#).**4.11.1.21 drawText() [1/2]**

```
bool LibSfml::drawText (
    std::vector< Text * > ) [override], [virtual]
```

drawText function

Author

Louis

Parameters

<code>std::vector< <i>Text</i></code>	<code>*> texts</code>
--	--------------------------

Returns

bool

Implements [IDispModule](#).

4.11.1.22 drawText() [2/2]

```
bool LibSfml::drawText (
    Text * ) [virtual]
```

drawText function

Author

Louis

Parameters

<i>Text</i>	*text
-------------	-------

Returns

bool

Implements [IDispModule](#).

4.11.1.23 getEntities()

```
std::vector< Entity * > LibSfml::getEntities ( ) [override], [virtual]
```

getEntities function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

`std::vector<Entity*>`

Implements [IDispModule](#).

4.11.1.24 getFPS()

```
int LibSfml::getFPS ( ) [override], [virtual]
```

getFPS function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

`int`

Implements [IDispModule](#).

4.11.1.25 getRes()

```
std::vector< float > LibSfml::getRes ( ) [override], [virtual]
```

getRes function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

`std::vector<float>`

Implements [IDispModule](#).

4.11.1.26 `getScore()`

```
int LibSfml::getScore ( ) [override], [virtual]
```

`getScore` function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

int

Implements [IDispModule](#).

4.11.1.27 `getSize()`

```
std::vector< float > LibSfml::getSize ( ) [override], [virtual]
```

`getSize` function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<float>

Implements [IDispModule](#).

4.11.1.28 `getUserInput()`

```
Key LibSfml::getUserInput ( ) [override], [virtual]
```

`getUserInput` function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

Key

Implements [IDispModule](#).**4.11.1.29 initScreen()**

```
bool LibSfml::initScreen ( ) [override], [virtual]
```

initScreen function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).**4.11.1.30 sceneSwitch()**

```
bool LibSfml::sceneSwitch ( ) [override], [virtual]
```

sceneSwitch function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.11.1.31 setScore()

```
bool LibSfml::setScore (
    int score ) [override], [virtual]
```

setScore function

Author

Louis

Parameters

<i>int</i>	score
------------	-------

Returns

bool

Implements [IDispModule](#).

4.11.1.32 setUserInput()

```
void LibSfml::setUserInput (
    Key ) [override], [virtual]
```

setUserInput function

Author

Louis

Parameters

<i>Key</i>	
------------	--

Returns

void

Implements [IDispModule](#).

4.11.1.33 update()

```
bool LibSfml::update ( ) [override], [virtual]
```

update function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Implements [IDispModule](#).

4.11.1.34 updateEntity() [1/2]

```
bool LibSfml::updateEntity (
    Id ,
    Entity * ) [override], [virtual]
```

updateEntity function

Author

Louis

Parameters

<i>Id</i>	id
Entity	*entity

Returns

bool

Implements [IDispModule](#).

4.11.1.35 updateEntity() [2/2]

```
bool LibSfml::updateEntity (
    std::vector< std::pair< Id, Entity * >> ) [override], [virtual]
```

updateEntity function

Author

Louis

Parameters

<code>std::vector<std::pair<Id,Entity</code>	<code>*>> entities</code>
--	---------------------------------

Returns

bool

Implements [IDispModule](#).

4.11.1.36 updateProp() [1/2]

```
bool LibSfml::updateProp (
    Id ,
    Prop * ) [override], [virtual]
```

updateProp function

Author

Louis

Parameters

<i>Id</i>	id
<i>Prop</i>	*prop

Returns

bool

Implements [IDispModule](#).

4.11.1.37 updateProp() [2/2]

```
bool LibSfml::updateProp (
    std::vector< std::pair< Id, Prop * >> ) [override], [virtual]
```

updateProp function

Author

Louis

Parameters

<code>std::vector<std::pair<Id,Prop</code>	<code>*>> props</code>
--	------------------------------

Returns

bool

Implements [IDispModule](#).

4.11.1.38 updateText() [1/2]

```
bool LibSfml::updateText (
    Id ,
    Text * ) [override], [virtual]
```

updateText function

Author

Louis

Parameters

<i>Id</i>	id
<i>Text</i>	*text

Returns

bool

Implements [IDispModule](#).

4.11.1.39 updateText() [2/2]

```
bool LibSfml::updateText (
    std::vector< std::pair< Id, Text * >> ) [override], [virtual]
```

updateText function

Author

Louis

Parameters

<code>std::vector<std::pair<Id,Text</code>	<code>*>> texts</code>
--	------------------------------

Returns

bool

Implements [IDispModule](#).

4.11.1.40 writeScore()

```
bool LibSfml::writeScore ( ) [override], [virtual]
```

writeScore function

Author

Paul

Parameters

<code>void</code>

Returns

bool

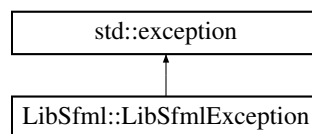
Implements [IDispModule](#).

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

- src/lib/graphical/SFML/LibSFML.hpp
- src/lib/graphical/SFML/LibSFML.cpp

4.12 LibSfml::LibSfmlException Class Reference

Inheritance diagram for LibSfml::LibSfmlException:



Public Member Functions

- [LibSfmlException](#) (const std::string &message, const std::string &component="Unknown")
Constructor of the [LibSfmlException](#) class.
- const char * [what](#) () const noexcept override
Return the exception message.

4.12.1 Constructor & Destructor Documentation

4.12.1.1 LibSfmlException()

```

LibSfml::LibSfmlException::LibSfmlException (
    const std::string & message,
    const std::string & component = "Unknown" ) [explicit]
  
```

Constructor of the [LibSfmlException](#) class.

Parameters

<i>message</i>	The exception message
<i>component</i>	The component that throw the exception

4.12.2 Member Function Documentation

4.12.2.1 what()

```
const char * LibSfml::LibSfmlException::what ( ) const [override], [noexcept]
```

Return the exception message.

Returns

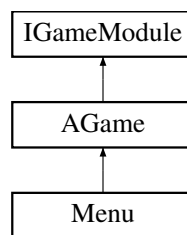
The exception message

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

- src/lib/graphical/SFML/LibSFML.hpp
- src/lib/graphical/SFML/LibSFML.cpp

4.13 Menu Class Reference

Inheritance diagram for Menu:



Public Member Functions

- [Menu](#) ()
Menu constructor.
- [~Menu](#) ()
Menu destructor.
- State [systemInit](#) () override
systemInit function
- void [systemOnUserInput](#) (int) override
systemOnUserInput function
- State [systemStop](#) () override
systemStop function
- std::vector< [Text](#) * > [textGetAll](#) () override
textGetAll function
- int [getScore](#) () const
getScore function

Protected Member Functions

- void [_initMenu](#) ()
_initMenu function

Protected Attributes

- int **_index**
- float **_i**
- State **_state**
- std::vector< [Text](#) * > **_texts**
- std::string **libPath** = `"/lib/"`
- std::vector< std::string > **_gameLibs**
- std::vector< std::string > **_graphLibs**
- std::vector< std::string > **_gameFounds**
- std::vector< std::string > **_graphFounds**

4.13.1 Constructor & Destructor Documentation

4.13.1.1 Menu()

`Menu::Menu ()`

[Menu](#) constructor.

Author

Zelie

Parameters

<i>void</i>	
-------------	--

4.13.1.2 ~Menu()

`Menu::~~Menu ()`

[Menu](#) destructor.

Author

Zelie

Parameters

<i>void</i>	
-------------	--

4.13.2 Member Function Documentation

4.13.2.1 `_initMenu()`

```
void Menu::_initMenu ( ) [protected]
```

`_initMenu` function

Author

Zelie

Parameters

<i>void</i>	
-------------	--

Returns

void

4.13.2.2 `getScore()`

```
int Menu::getScore ( ) const [virtual]
```

`getScore` function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

int

Implements [IGameModule](#).

4.13.2.3 systemInit()

```
State Menu::systemInit ( ) [override], [virtual]
```

systemInit function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implements [IGameModule](#).

4.13.2.4 systemOnUserInput()

```
void Menu::systemOnUserInput (
    int ) [override], [virtual]
```

systemOnUserInput function

Author

Louis

Parameters

<i>int</i>	input
------------	-------

Returns

void

Implements [IGameModule](#).

4.13.2.5 systemStop()

```
State Menu::systemStop ( ) [override], [virtual]
```

systemStop function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Implements [IGameModule](#).

4.13.2.6 textGetAll()

```
std::vector< Text * > Menu::textGetAll ( ) [override], [virtual]
```

textGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Text *>

Implements [IGameModule](#).

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

- `src/core/Menu/Menu.hpp`
- `src/core/Menu/Menu.cpp`

4.14 Ncurses Class Reference

Classes

- class [NcursesException](#)

Static Public Member Functions

- static WINDOW * [_initscr](#) (void)
_initscr function
- static int [_endwin](#) (void)
_endwin function
- static int [_clear](#) ()
_clear function
- static int [_getch](#) ()
_getch function
- static void [_printw](#) (std::string str)
_printw function
- static void [_refresh](#) ()
_refresh function
- static void [_timeout](#) ()
_timeout function
- static void [_keypad](#) (WINDOW *, bool)
_keypad function
- static void [_curs_set](#) (int)
_curs_set function
- static int [_mvaddch](#) (int, int, unsigned int)
_mvaddch function
- static int [_mvaddstr](#) (int, int, const char *)
_mvaddstr function

4.14.1 Member Function Documentation

4.14.1.1 [_clear\(\)](#)

```
int Ncurses::_clear ( ) [static]
```

[_clear](#) function

Author

Zelie

Parameters

<i>void</i>	
-------------	--

Returns

int

4.14.1.2 `_curs_set()`

```
void Ncurses::_curs_set (
    int  curs ) [static]
```

`_curs_set` function

Author

Zelie

Parameters

<i>int</i>	visibility
------------	------------

Returns

void

4.14.1.3 `_endwin()`

```
int Ncurses::_endwin (
    void ) [static]
```

`_endwin` function

Author

Zelie

Parameters

<i>void</i>	
-------------	--

Returns

int

4.14.1.4 `_getch()`

```
int Ncurses::_getch ( ) [static]
```

`_getch` function

Author

Zelie

Parameters

<i>void</i>	
-------------	--

Returns

int

4.14.1.5 _initscr()

```
WINDOW * Ncurses::_initscr (
    void ) [static]
```

_initscr function

Author

Zelie

Parameters

<i>void</i>	
-------------	--

Returns

WINDOW *

4.14.1.6 _keypad()

```
void Ncurses::_keypad (
    WINDOW * win,
    bool boolean ) [static]
```

_keypad function

Author

Zelie

Parameters

<i>WINDOW</i>	*win
<i>bool</i>	bf

Returns

void

4.14.1.7 _mvaddch()

```
int Ncurses::_mvaddch (
    int y,
    int x,
    unsigned int ch ) [static]
```

_mvaddch function**Author**

Zelie

Parameters

<i>int</i>	x
<i>int</i>	y
<i>unsigned</i>	int ch

Returns

int

4.14.1.8 _mvaddstr()

```
int Ncurses::_mvaddstr (
    int y,
    int x,
    const char * str ) [static]
```

_mvaddstr function**Author**

Zelie

Parameters

<i>int</i>	x
<i>int</i>	y
<i>const</i>	char *str

4.14.1.9 `_printw()`

```
void Ncurses::_printw (
    std::string str ) [static]
```

`_printw` function

Author

Zelie

Parameters

<code>std::string</code>	<code>str</code>
--------------------------	------------------

Returns

`void`

4.14.1.10 `_refresh()`

```
void Ncurses::_refresh ( ) [static]
```

`_refresh` function

Author

Zelie

Parameters

<code>void</code>	
-------------------	--

Returns

`void`

4.14.1.11 `_timeout()`

```
void Ncurses::_timeout ( ) [static]
```

`_timeout` function

Author

Zelie

Parameters

<i>void</i>	
-------------	--

Returns

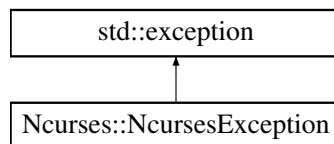
void

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

- src/lib/graphical/Ncurses/Ncurses.hpp
- src/lib/graphical/Ncurses/Ncurses.cpp

4.15 Ncurses::NcursesException Class Reference

Inheritance diagram for Ncurses::NcursesException:

**Public Member Functions**

- [NcursesException](#) (const std::string &message)
NcursesException constructor.
- const char * [what](#) () const noexcept override
what function

4.15.1 Constructor & Destructor Documentation

4.15.1.1 NcursesException()

```
Ncurses::NcursesException::NcursesException (
    const std::string & message ) [explicit]
```

[NcursesException](#) constructor.

Constructor of the [NcursesException](#) class.

Author

Zelie

Parameters

<i>const</i>	std::string &message
<i>message</i>	The exception message
<i>component</i>	The component that throw the exception

4.15.2 Member Function Documentation

4.15.2.1 what()

```
const char * Ncurses::NcursesException::what ( ) const [override], [noexcept]
```

what function

Return the exception message.

Author

Zelie

Parameters

<i>void</i>	
-------------	--

Returns

const char *

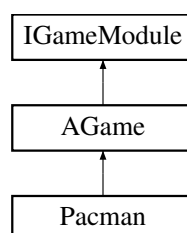
The exception message

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

- src/lib/graphical/Ncurses/Ncurses.hpp
- src/lib/graphical/Ncurses/Ncurses.cpp

4.16 Pacman Class Reference

Inheritance diagram for Pacman:



Public Member Functions

- [Pacman](#) ()
Pacman constructor.
- [~Pacman](#) ()
Pacman destructor.
- State [systemInit](#) () override
systemInit function
- State [systemStart](#) () override
systemStart function
- State [systemStop](#) () override
systemStop function
- State [systemClear](#) () override
systemClear function
- State [systemUpdate](#) () override
systemUpdate function
- State [systemGetState](#) () const override
systemGetState function
- void [systemSetState](#) (State) override
systemSetState function
- void [systemOnUserInput](#) (int) override
systemOnUserInput function
- void [systemDebug](#) () override
systemDebug function
- std::vector< [Prop](#) * > [propGetAll](#) () override
propGetAll function
- std::vector< [Entity](#) * > [entityGetAll](#) () override
entityGetAll function
- [Entity](#) * [entityGet](#) (Id) override
entityGet function
- [Entity](#) * [entityGet](#) (Name) override
entityGet function
- std::vector< [Entity](#) * > [entityGetAllOfType](#) (EntityType) override
entityGetAllOfType function
- Id [entityGetId](#) (Name) override
entitygetId function
- Name [entityGetName](#) (Id) override
entityGetName function
- std::vector< float > [entityGetProperty](#) (Id, Property) override
entityGetProperty function
- bool [entityUpdate](#) (Id, Property, int) override
entityUpdate function
- bool [entityUpdate](#) (Id, Property, float) override
entityUpdate function
- bool [entityUpdate](#) (Id, Property, std::vector< float >) override
entityUpdate function
- bool [entityUpdate](#) (Id, Property, std::vector< int >) override
entityUpdate function
- bool [entityUpdate](#) (Id, Property, Name) override
entityUpdate function
- bool [entityPush](#) ([Entity](#)) override

- bool **entityPush_front** ([Entity](#)) override
- bool **entityRemove** (Id) override
entityRemove function
- bool **entityPop** () override
entityRemove function
- bool **entityPop_front** () override
entityPop_front function
- bool **entityClearAll** () override
entityClearAll function
- std::vector< [Text](#) * > **textGetAll** () override
textGetAll function
- int **getScore** () const override
getScore function
- void **setScore** (int score) override
setScore function
- std::vector< [Prop](#) * > **propGetAllOfType** (PropType) override
propGetAllOfType function
- bool **propRemove** ([[maybe_unused]]Id id) override

Protected Attributes

- State **_state**

4.16.1 Constructor & Destructor Documentation

4.16.1.1 Pacman()

`Pacman::Pacman ()`

[Pacman](#) constructor.

Author

Paul

Parameters

<i>void</i>	
-------------	--

4.16.1.2 ~Pacman()

`Pacman::~~Pacman ()`

[Pacman](#) destructor.

Author

Paul

Parameters

<i>void</i>	
-------------	--

4.16.2 Member Function Documentation

4.16.2.1 entityClearAll()

```
bool Pacman::entityClearAll ( ) [override], [virtual]
```

entityClearAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Reimplemented from [AGame](#).

4.16.2.2 entityGet() [1/2]

```
Entity * Pacman::entityGet (
    Id ) [override], [virtual]
```

entityGet function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

[Entity](#) *

Reimplemented from [AGame](#).

4.16.2.3 entityGet() [2/2]

```
Entity * Pacman::entityGet (
    Name ) [override], [virtual]
```

entityGet function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

[Entity](#) *

Reimplemented from [AGame](#).

4.16.2.4 entityGetAll()

```
std::vector< Entity * > Pacman::entityGetAll ( ) [override], [virtual]
```

entityGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Entity *>

Reimplemented from [AGame](#).

4.16.2.5 entityGetAllOfType()

```
std::vector< Entity * > Pacman::entityGetAllOfType (
    EntityType ) [override], [virtual]
```

entityGetAllOfType function

Author

Louis

Parameters

<i>EntityType</i>	type
-------------------	------

Returns

std::vector<Entity *>

Reimplemented from [AGame](#).

4.16.2.6 entityGetId()

```
Id Pacman::entityGetId (
    Name ) [override], [virtual]
```

entitygetId function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

Id id

Reimplemented from [AGame](#).

4.16.2.7 entityGetName()

```
Name Pacman::entityGetName (
    Id ) [override], [virtual]
```

entityGetName function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

Name name

Reimplemented from [AGame](#).

4.16.2.8 entityGetProperty()

```
std::vector< float > Pacman::entityGetProperty (
    Id ,
    Property ) [override], [virtual]
```

entityGetProperty function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property

Returns

int

Reimplemented from [AGame](#).

4.16.2.9 entityPop()

```
bool Pacman::entityPop ( ) [override], [virtual]
```

entityRemove function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

bool

Reimplemented from [AGame](#).

4.16.2.10 entityPop_front()

```
bool Pacman::entityPop_front ( ) [override], [virtual]
```

entityPop_front function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Reimplemented from [AGame](#).

4.16.2.11 entityRemove()

```
bool Pacman::entityRemove (
    Id ) [override], [virtual]
```

entityRemove function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Reimplemented from [AGame](#).**4.16.2.12 entityUpdate() [1/5]**

```
bool Pacman::entityUpdate (
    Id ,
    Property ,
    float ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>float</i>	value

Returns

bool

Reimplemented from [AGame](#).**4.16.2.13 entityUpdate() [2/5]**

```
bool Pacman::entityUpdate (
    Id ,
    Property ,
    int ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>int</i>	value

Returns

bool

Reimplemented from [AGame](#).**4.16.2.14 entityUpdate() [3/5]**

```
bool Pacman::entityUpdate (
    Id ,
    Property ,
    Name ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>Name</i>	name

Returns

bool

Reimplemented from [AGame](#).**4.16.2.15 entityUpdate() [4/5]**

```
bool Pacman::entityUpdate (
    Id ,
    Property ,
    std::vector< float > ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<float></i>	value

Returns

bool

Reimplemented from [AGame](#).**4.16.2.16 entityUpdate()** [5/5]

```
bool Pacman::entityUpdate (
    Id ,
    Property ,
    std::vector< int > ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<int></i>	value

Returns

bool

Reimplemented from [AGame](#).**4.16.2.17 getScore()**

```
int Pacman::getScore ( ) const [override], [virtual]
```

getScore function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

int

Reimplemented from [AGame](#).**4.16.2.18 propGetAll()**

```
std::vector< Prop * > Pacman::propGetAll ( ) [override], [virtual]
```

propGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Prop *>

Reimplemented from [AGame](#).**4.16.2.19 propGetAllOfType()**

```
std::vector< Prop * > Pacman::propGetAllOfType (
    PropType ) [override], [virtual]
```

propGetAllOfType function

Author

Louis

Parameters

<i>PropType</i>	type
-----------------	------

Returns

std::vector<Prop *>

Reimplemented from [AGame](#).

4.16.2.20 setScore()

```
void Pacman::setScore (
    int score ) [override], [virtual]
```

setScore function

Author

Paul

Parameters

<i>int</i>	score
------------	-------

Returns

void

Reimplemented from [AGame](#).

4.16.2.21 systemClear()

```
State Pacman::systemClear ( ) [override], [virtual]
```

systemClear function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).**4.16.2.22 systemDebug()**

```
void Pacman::systemDebug ( ) [override], [virtual]
```

systemDebug function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

void

Reimplemented from [AGame](#).**4.16.2.23 systemGetState()**

```
State Pacman::systemGetState ( ) const [override], [virtual]
```

systemGetState function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).

4.16.2.24 systemInit()

```
State Pacman::systemInit ( ) [override], [virtual]
```

systemInit function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).

4.16.2.25 systemOnUserInput()

```
void Pacman::systemOnUserInput (
    int ) [override], [virtual]
```

systemOnUserInput function

Author

Louis

Parameters

<i>int</i>	input
------------	-------

Returns

void

Reimplemented from [AGame](#).

4.16.2.26 systemSetState()

```
void Pacman::systemSetState (
    State ) [override], [virtual]
```

systemSetState function

Author

Louis

Parameters

<i>State</i>	state
--------------	-------

Returns

void

Reimplemented from [AGame](#).

4.16.2.27 systemStart()

```
State Pacman::systemStart ( ) [override], [virtual]
```

systemStart function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).

4.16.2.28 systemStop()

```
State Pacman::systemStop ( ) [override], [virtual]
```

systemStop function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).**4.16.2.29 systemUpdate()**

```
State Pacman::systemUpdate ( ) [override], [virtual]
```

systemUpdate function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).**4.16.2.30 textGetAll()**

```
std::vector< Text * > Pacman::textGetAll ( ) [override], [virtual]
```

textGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Text *>

Reimplemented from [AGame](#).

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

- src/lib/games/Pacman/Pacman.hpp
- src/lib/games/Pacman/Pacman.cpp

4.17 Prop Class Reference

Public Member Functions

- [~Prop](#) ()
Prop destructor.
- [Prop](#) ()
Prop constructor.
- [Prop](#) (PropType)
Prop constructor.
- [Prop](#) (PropType, std::vector< float >)
Prop constructor.
- void [setProperty](#) (Property, int)
setProperty function
- void [setProperty](#) (Property, float)
setProperty function
- void [setProperty](#) (Property, std::vector< float >)
setProperty function
- void [setProperty](#) (Property, std::vector< int >)
setProperty function
- void [setName](#) (Name)
setName function
- std::vector< float > [getProperty](#) (Property)
getProperty function
- std::map< Property, std::vector< float > > [getProperties](#) ()
getProperties function
- PropType [getType](#) ()
getType function
- Name [getName](#) ()
getName function
- std::string * [getSpritePath](#) () const
getSpritePath function
- void [setSpritePath](#) (std::string *spritePath)
setSpritePath function
- char [getSpriteChar](#) () const
getSpriteChar function
- void [setSpriteChar](#) (char spriteChar)
setSpriteChar function

Protected Attributes

- `std::map< Property, std::vector< float > > _properties`
- `PropType _type`
- `Name _name`
- `void * _clickAction`
- `std::string * _spritePath`
- `char _spriteChar`

4.17.1 Constructor & Destructor Documentation

4.17.1.1 `~Prop()`

`Prop::~~Prop ()`

[Prop](#) destructor.

Author

Louis

Parameters

<i>void</i>	
-------------	--

4.17.1.2 `Prop()` [1/3]

`Prop::Prop ()`

[Prop](#) constructor.

Author

Louis

Parameters

<i>void</i>	
-------------	--

4.17.1.3 `Prop()` [2/3]

`Prop::Prop (`

```
PropType type )
```

[Prop](#) constructor.

Author

Louis

Parameters

<i>PropType</i>	type
-----------------	------

4.17.1.4 Prop() [3/3]

```
Prop::Prop (
    PropType type,
    std::vector< float > position )
```

[Prop](#) constructor.

Author

Louis

Parameters

<i>PropType</i>	type
<i>std::vector<float></i>	properties

4.17.2 Member Function Documentation

4.17.2.1 getName()

```
Name Prop::getName ( )
```

getName function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

Name

4.17.2.2 getProperties()

```
std::map<Property, std::vector<float> > Prop::getProperties ( )
```

getProperties function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

```
std::map<Property, std::vector<float>>
```

4.17.2.3 getProperty()

```
std::vector< float > Prop::getProperty (
    Property property )
```

getProperty function

Author

Louis

Parameters

<i>Property</i>	<i>property</i>
-----------------	-----------------

Returns

`std::vector<float>`

4.17.2.4 getSpriteChar()

```
char Prop::getSpriteChar ( ) const
```

getSpriteChar function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

`char`

4.17.2.5 getSpritePath()

```
std::string * Prop::getSpritePath ( ) const
```

getSpritePath function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

`std::string *`

4.17.2.6 `getType()`

```
PropType Prop::getType ( )
```

`getType` function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

PropType

4.17.2.7 `setName()`

```
void Prop::setName (
    Name name )
```

`setName` function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

void

4.17.2.8 `setProperty()` [1/4]

```
void Prop::setProperty (
    Property property,
    float value )
```

`setProperty` function

Author

Louis

Parameters

<i>Property</i>	property
<i>float</i>	value

Returns

void

4.17.2.9 setProperty() [2/4]

```
void Prop::setProperty (
    Property property,
    int value )
```

setProperty function

Author

Louis

Parameters

<i>Property</i>	property
<i>int</i>	value

Returns

void

4.17.2.10 setProperty() [3/4]

```
void Prop::setProperty (
    Property property,
    std::vector< float > value )
```

setProperty function

Author

Louis

Parameters

<i>Property</i>	property
<i>std::vector<float></i>	value

Returns

void

4.17.2.11 setProperty() [4/4]

```
void Prop::setProperty (
    Property property,
    std::vector< int > value )
```

setProperty function

Author

Louis

Parameters

<i>Property</i>	property
<i>std::vector<int></i>	value

Returns

void

4.17.2.12 setSpriteChar()

```
void Prop::setSpriteChar (
    char spriteChar )
```

setSpriteChar function

Author

Louis

Parameters

<i>char</i>	spriteChar
-------------	------------

Returns

void

4.17.2.13 setSpritePath()

```
void Prop::setSpritePath (
    std::string * spritePath )
```

setSpritePath function

Author

Louis

Parameters

<i>std::string</i>	*spritePath
--------------------	-------------

Returns

void

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

- src/lib/games/Prop.hpp
- src/lib/games/Prop.cpp

4.18 Sdl Class Reference

Static Public Member Functions

- static int [initSDL](#) ()
initSDL function
- static void [quitSDL](#) ()
quitSDL function
- static SDL_Window * [createWindow](#) (const char *title, int x, int y, int w, int h, Uint32 flags)
createWindow function
- static void [destroyWindow](#) (SDL_Window *window)
destroyWindow function
- static SDL_Renderer * [createRenderer](#) (SDL_Window *window, int index, Uint32 flags)
createRenderer function
- static void [destroyRenderer](#) (SDL_Renderer *renderer)
destroyRenderer function
- static void [renderClear](#) (SDL_Renderer *renderer)
renderClear function

- static void [renderCopy](#) (SDL_Renderer *renderer, SDL_Texture *texture, const SDL_Rect *srcrect, const SDL_Rect *dstrect)
renderCopy function
- static void [renderCopyEx](#) (SDL_Renderer *renderer, SDL_Texture *texture, const SDL_Rect *srcrect, const SDL_Rect *dstrect, const double angle, const SDL_Point *center, const SDL_RendererFlip flip)
renderCopyEx function
- static void [renderPresent](#) (SDL_Renderer *renderer)
renderPresent function
- static void [renderDrawPoint](#) (SDL_Renderer *renderer, int x, int y)
renderDrawPoint function
- static void [setRenderDrawColor](#) (SDL_Renderer *renderer, Uint8 r, Uint8 g, Uint8 b, Uint8 a)
renderDrawColor function
- static SDL_Texture * [createTextureFromSurface](#) (SDL_Renderer *renderer, SDL_Surface *surface)
createTextureFromSurface function
- static SDL_Texture * [loadTexture](#) (SDL_Renderer *renderer, const char *file)
loadTexture function
- static void [destroyTexture](#) (SDL_Texture *texture)
destroyTexture function
- static void [queryTexture](#) (SDL_Texture *texture, Uint32 *format, int *access, int *w, int *h)
queryTexture function
- static int [initIMG](#) ()
initIMG function
- static void [quitIMG](#) ()
quitIMG function
- static SDL_Surface * [loadBMP](#) (const char *file)
loadBMP function
- static SDL_Surface * [loadIMG](#) (const char *file)
loadIMG function
- static void [freeSurface](#) (SDL_Surface *surface)
freeSurface function
- static int [initTTF](#) ()
initTTF function
- static void [quitTTF](#) ()
quitTTF function
- static TTF_Font * [openFont](#) (const char *file, int ptsize)
openFont function
- static void [closeFont](#) (TTF_Font *font)
closeFont function
- static SDL_Surface * [renderText_Solid](#) (TTF_Font *font, const char *text, SDL_Color fg)
renderText_Solid function
- static SDL_Surface * [renderText_Shaded](#) (TTF_Font *font, const char *text, SDL_Color fg, SDL_Color bg)
renderText_Shaded function
- static SDL_Surface * [renderText_Blended](#) (TTF_Font *font, const char *text, SDL_Color fg)
renderText_Blended function

4.18.1 Member Function Documentation

4.18.1.1 closeFont()

```
void Sdl::closeFont (
    TTF_Font * font ) [static]
```

closeFont function

Author

Paul

Parameters

<i>TTF_Font</i>	*font
-----------------	-------

Returns

void

4.18.1.2 createRenderer()

```
SDL_Renderer * Sdl::createRenderer (
    SDL_Window * window,
    int index,
    Uint32 flags ) [static]
```

createRenderer function

Author

Paul

Parameters

<i>SDL_Window</i>	*window
<i>int</i>	index
<i>Uint32</i>	flags

Returns

SDL_Renderer *

4.18.1.3 createTextureFromSurface()

```
SDL_Texture * Sdl::createTextureFromSurface (
    SDL_Renderer * renderer,
    SDL_Surface * surface ) [static]
```

createTextureFromSurface function

Author

Paul

Parameters

<i>SDL_Renderer</i>	*renderer
<i>SDL_Surface</i>	*surface

Returns

SDL_Texture *

4.18.1.4 createWindow()

```
SDL_Window * Sdl::createWindow (
    const char * title,
    int x,
    int y,
    int w,
    int h,
    Uint32 flags ) [static]
```

createWindow function

Author

Paul

Parameters

<i>const</i>	char *title
<i>int</i>	x
<i>int</i>	y
<i>int</i>	w
<i>int</i>	h
<i>Uint32</i>	flags

Returns

SDL_Window *

4.18.1.5 destroyRenderer()

```
void Sdl::destroyRenderer (
    SDL_Renderer * renderer ) [static]
```

destroyRenderer function

Author

Paul

Parameters

<i>SDL_Renderer</i>	* <i>renderer</i>
---------------------	-------------------

Returns

void

4.18.1.6 destroyTexture()

```
void Sdl::destroyTexture (
    SDL_Texture * texture ) [static]
```

destroyTexture function

Parameters

<i>SDL_Texture</i>	* <i>texture</i>
--------------------	------------------

Returns

void

4.18.1.7 destroyWindow()

```
void Sdl::destroyWindow (
    SDL_Window * window ) [static]
```

destroyWindow function

Author

Paul

Parameters

<i>SDL_Window</i>	*window
-------------------	---------

Returns

void

4.18.1.8 freeSurface()

```
void Sdl::freeSurface (
    SDL_Surface * surface ) [static]
```

freeSurface function

Author

Paul

Parameters

<i>SDL_Surface</i>	*surface
--------------------	----------

Returns

void

4.18.1.9 initIMG()

```
int Sdl::initIMG ( ) [static]
```

initIMG function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

int

4.18.1.10 initSDL()

```
int Sdl::initSDL ( ) [static]
```

initSDL function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

int

4.18.1.11 initTTF()

```
int Sdl::initTTF ( ) [static]
```

initTTF function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

int

4.18.1.12 loadBMP()

```
SDL_Surface * Sdl::loadBMP (
    const char * file ) [static]
```

loadBMP function

Author

Paul

Parameters

<i>const</i>	char *file
--------------	------------

Returns

SDL_Surface *

4.18.1.13 loadIMG()

```
SDL_Surface * Sdl::loadIMG (  
    const char * file ) [static]
```

loadIMG function

Author

Paul

Parameters

<i>const</i>	char *file
--------------	------------

Returns

SDL_Surface *

4.18.1.14 loadTexture()

```
SDL_Texture * Sdl::loadTexture (  
    SDL_Renderer * renderer,  
    const char * file ) [static]
```

loadTexture function

Author

Paul

Parameters

<i>SDL_Renderer</i>	*renderer
<i>const</i>	char *file

Returns

void

4.18.1.15 openFont()

```
TTF_Font * Sdl::openFont (
    const char * file,
    int ptsize ) [static]
```

openFont function

Author

Paul

Parameters

<i>const</i>	char *file
<i>int</i>	ptsize

Returns

TTF_Font *

4.18.1.16 queryTexture()

```
void Sdl::queryTexture (
    SDL_Texture * texture,
    Uint32 * format,
    int * access,
    int * w,
    int * h ) [static]
```

queryTexture function

Author

Paul

Parameters

<i>SDL_Texture</i>	*texture
<i>Uint32</i>	*format
<i>int</i>	*access
<i>int</i>	*w
<i>int</i>	*h

Returns

void

4.18.1.17 quitIMG()

```
void Sdl::quitIMG ( ) [static]
```

quitIMG function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

void

4.18.1.18 quitSDL()

```
void Sdl::quitSDL ( ) [static]
```

quitSDL function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

void

4.18.1.19 quitTTF()

```
void Sdl::quitTTF ( ) [static]
```

quitTTF function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

void

4.18.1.20 renderClear()

```
void Sdl::renderClear (
    SDL_Renderer * renderer ) [static]
```

renderClear function

Author

Paul

Parameters

<i>SDL_Renderer</i>	<i>*renderer</i>
---------------------	------------------

Returns

void

4.18.1.21 renderCopy()

```
void Sdl::renderCopy (
    SDL_Renderer * renderer,
    SDL_Texture * texture,
    const SDL_Rect * srcrect,
    const SDL_Rect * dstrect ) [static]
```

renderCopy function

Author

Paul

Parameters

<i>SDL_Renderer</i>	*renderer
<i>SDL_Texture</i>	*texture
<i>const</i>	SDL_Rect *srcrect
<i>const</i>	SDL_Rect *dstrect

Returns

void

4.18.1.22 renderCopyEx()

```
void Sdl::renderCopyEx (
    SDL_Renderer * renderer,
    SDL_Texture * texture,
    const SDL_Rect * srcrect,
    const SDL_Rect * dstrect,
    const double angle,
    const SDL_Point * center,
    const SDL_RendererFlip flip ) [static]
```

renderCopyEx function

Author

Paul

Parameters

<i>SDL_Renderer</i>	*renderer
<i>SDL_Texture</i>	*texture
<i>const</i>	SDL_Rect *srcrect
<i>const</i>	SDL_Rect *dstrect
<i>const</i>	double angle
<i>const</i>	SDL_Point *center
<i>const</i>	SDL_RendererFlip flip

Returns

void

4.18.1.23 renderDrawPoint()

```
void Sdl::renderDrawPoint (
    SDL_Renderer * renderer,
    int x,
    int y ) [static]
```

renderDrawPoint function

Author

Paul

Parameters

<i>SDL_Renderer</i>	*renderer
<i>int</i>	x
<i>int</i>	y

Returns

void

4.18.1.24 renderPresent()

```
void Sdl::renderPresent (
    SDL_Renderer * renderer ) [static]
```

renderPresent function

Author

Paul

Parameters

<i>SDL_Renderer</i>	*renderer
---------------------	-----------

Returns

void

4.18.1.25 renderText_Blended()

```
SDL_Surface * Sdl::renderText_Blended (
    TTF_Font * font,
    const char * text,
    SDL_Color fg ) [static]
```

renderText_Blended function

Author

Paul

Parameters

<i>TTF_Font</i>	*font
<i>const</i>	char *text
<i>SDL_Color</i>	fg

Returns

SDL_Surface *

4.18.1.26 renderText_Shaded()

```
SDL_Surface * Sdl::renderText_Shaded (
    TTF_Font * font,
    const char * text,
    SDL_Color fg,
    SDL_Color bg ) [static]
```

renderText_Shaded function

Author

Paul

Parameters

<i>TTF_Font</i>	*font
<i>const</i>	char *text
<i>SDL_Color</i>	fg
<i>SDL_Color</i>	bg

Returns

SDL_Surface *

4.18.1.27 renderText_Solid()

```
SDL_Surface * Sdl::renderText_Solid (
    TTF_Font * font,
    const char * text,
    SDL_Color fg ) [static]
```

renderText_Solid function

Author

Paul

Parameters

<i>TTF_Font</i>	*font
<i>const</i>	char *text
<i>SDL_Color</i>	fg

Returns

SDL_Surface *

4.18.1.28 setRenderDrawColor()

```
void Sdl::setRenderDrawColor (
    SDL_Renderer * renderer,
    Uint8 r,
    Uint8 g,
    Uint8 b,
    Uint8 a ) [static]
```

renderDrawColor function

Author

Paul

Parameters

<i>SDL_Renderer</i>	*renderer
<i>Uint8</i>	r
<i>Uint8</i>	g
<i>Uint8</i>	b
<i>Uint8</i>	a

Returns

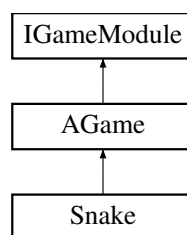
void

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

- src/lib/graphical/SDL2/SDL.hpp
- src/lib/graphical/SDL2/SDL.cpp

4.19 Snake Class Reference

Inheritance diagram for Snake:



Public Member Functions

- [Snake](#) ()
Snake constructor.
- [~Snake](#) ()
Snake destructor.
- State [systemInit](#) () override
systemInit function
- State [systemStart](#) () override
systemStart function
- State [systemStop](#) () override
systemStop function
- State [systemClear](#) () override
systemClear function
- State [systemUpdate](#) () override
systemUpdate function
- State [systemGetState](#) () const override
systemGetState function
- void [systemSetState](#) (State) override
systemSetState function
- void [systemOnUserInput](#) (int) override
systemOnUserInput function
- void [systemDebug](#) () override
systemDebug function
- std::vector< [Prop](#) * > [propGetAll](#) () override
propGetAll function
- std::vector< [Entity](#) * > [entityGetAll](#) () override
entityGetAll function

- **Entity** * **entityGet** (Id) override
entityGet function
- **Entity** * **entityGet** (Name) override
entityGet function
- std::vector< **Entity** * > **entityGetAllOfType** (EntityType) override
entityGetAllOfType function
- Id **entityGetId** (Name) override
entitygetId function
- Name **entityGetName** (Id) override
entityGetName function
- std::vector< float > **entityGetProperty** (Id, Property) override
entityGetProperty function
- bool **entityUpdate** (Id, Property, int) override
entityUpdate function
- bool **entityUpdate** (Id, Property, float) override
entityUpdate function
- bool **entityUpdate** (Id, Property, std::vector< float >) override
entityUpdate function
- bool **entityUpdate** (Id, Property, std::vector< int >) override
entityUpdate function
- bool **entityUpdate** (Id, Property, Name) override
entityUpdate function
- bool **entityPush** (**Entity**) override
- bool **entityPush_front** (**Entity**) override
- bool **entityRemove** (Id) override
entityRemove function
- bool **entityPop** () override
entityRemove function
- bool **entityPop_front** () override
entityPop_front function
- bool **entityClearAll** () override
entityClearAll function
- std::vector< **Text** * > **textGetAll** () override
textGetAll function
- int **getScore** () const override
getScore function
- void **setScore** (int score) override
setScore function
- std::vector< **Prop** * > **propGetAllOfType** (PropType) override
propGetAllOfType function
- bool **propRemove** ([[maybe_unused]]Id id) override

Protected Attributes

- State **_state**

4.19.1 Constructor & Destructor Documentation

4.19.1.1 Snake()

```
Snake::Snake ( )
```

[Snake](#) constructor.

Author

Louis

Parameters

<i>void</i>	
-------------	--

4.19.1.2 ~Snake()

```
Snake::~~Snake ( )
```

[Snake](#) destructor.

Author

Louis

Parameters

<i>void</i>	
-------------	--

4.19.2 Member Function Documentation

4.19.2.1 entityClearAll()

```
bool Snake::entityClearAll ( ) [override], [virtual]
```

entityClearAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Reimplemented from [AGame](#).

4.19.2.2 entityGet() [1/2]

```
Entity * Snake::entityGet (
    Id ) [override], [virtual]
```

entityGet function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

[Entity](#) *

Reimplemented from [AGame](#).

4.19.2.3 entityGet() [2/2]

```
Entity * Snake::entityGet (
    Name ) [override], [virtual]
```

entityGet function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

[Entity](#) *

Reimplemented from [AGame](#).

4.19.2.4 entityGetAll()

```
std::vector< Entity * > Snake::entityGetAll ( ) [override], [virtual]
```

entityGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Entity *>

Reimplemented from [AGame](#).

4.19.2.5 entityGetAllOfType()

```
std::vector< Entity * > Snake::entityGetAllOfType (
    EntityType ) [override], [virtual]
```

entityGetAllOfType function

Author

Louis

Parameters

<i>EntityType</i>	type
-------------------	------

Returns

std::vector<Entity *>

Reimplemented from [AGame](#).

4.19.2.6 entityGetId()

```
Id Snake::entityGetId (
    Name ) [override], [virtual]
```

entitygetId function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

Id id

Reimplemented from [AGame](#).

4.19.2.7 entityGetName()

```
Name Snake::entityGetName (
    Id ) [override], [virtual]
```

entityGetName function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

Name name

Reimplemented from [AGame](#).

4.19.2.8 entityGetProperty()

```
std::vector< float > Snake::entityGetProperty (
    Id ,
    Property ) [override], [virtual]
```

entityGetProperty function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property

Returns

int

Reimplemented from [AGame](#).

4.19.2.9 entityPop()

```
bool Snake::entityPop ( ) [override], [virtual]
```

entityRemove function

Author

Louis

Parameters

<i>Name</i>	name
-------------	------

Returns

bool

Reimplemented from [AGame](#).

4.19.2.10 entityPop_front()

```
bool Snake::entityPop_front ( ) [override], [virtual]
```

entityPop_front function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

bool

Reimplemented from [AGame](#).

4.19.2.11 entityRemove()

```
bool Snake::entityRemove (
    Id ) [override], [virtual]
```

entityRemove function

Author

Louis

Parameters

<i>Id</i>	id
-----------	----

Returns

bool

Reimplemented from [AGame](#).

4.19.2.12 entityUpdate() [1/5]

```
bool Snake::entityUpdate (
    Id ,
    Property ,
    float ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>float</i>	value

Returns

bool

Reimplemented from [AGame](#).

4.19.2.13 entityUpdate() [2/5]

```
bool Snake::entityUpdate (
    Id ,
    Property ,
    int ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>int</i>	value

Returns

bool

Reimplemented from [AGame](#).

4.19.2.14 entityUpdate() [3/5]

```
bool Snake::entityUpdate (
    Id ,
    Property ,
    Name ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>Name</i>	name

Returns

bool

Reimplemented from [AGame](#).

4.19.2.15 entityUpdate() [4/5]

```
bool Snake::entityUpdate (
    Id ,
    Property ,
    std::vector< float > ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<float></i>	value

Returns

bool

Reimplemented from [AGame](#).

4.19.2.16 entityUpdate() [5/5]

```
bool Snake::entityUpdate (
    Id ,
    Property ,
    std::vector< int > ) [override], [virtual]
```

entityUpdate function

Author

Louis

Parameters

<i>Id</i>	id
<i>Property</i>	property
<i>std::vector<int></i>	value

Returns

bool

Reimplemented from [AGame](#).

4.19.2.17 getScore()

```
int Snake::getScore ( ) const  [override], [virtual]
```

getScore function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

int

Reimplemented from [AGame](#).

4.19.2.18 propGetAll()

```
std::vector< Prop * > Snake::propGetAll ( )  [override], [virtual]
```

propGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

`std::vector<Prop *>`

Reimplemented from [AGame](#).

4.19.2.19 propGetAllOfType()

```
std::vector< Prop * > Snake::propGetAllOfType (
    PropType ) [override], [virtual]
```

propGetAllOfType function

Author

Louis

Parameters

<i>PropType</i>	type
-----------------	------

Returns

`std::vector<Prop *>`

Reimplemented from [AGame](#).

4.19.2.20 setScore()

```
void Snake::setScore (
    int score ) [override], [virtual]
```

setScore function

Author

Paul

Parameters

<i>int</i>	score
------------	-------

Returns

void

Reimplemented from [AGame](#).**4.19.2.21 systemClear()**

```
State Snake::systemClear ( ) [override], [virtual]
```

systemClear function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).**4.19.2.22 systemDebug()**

```
void Snake::systemDebug ( ) [override], [virtual]
```

systemDebug function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

void

Reimplemented from [AGame](#).

4.19.2.23 systemGetState()

```
State Snake::systemGetState ( ) const [override], [virtual]
```

systemGetState function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).

4.19.2.24 systemInit()

```
State Snake::systemInit ( ) [override], [virtual]
```

systemInit function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).

4.19.2.25 systemOnUserInput()

```
void Snake::systemOnUserInput (
    int ) [override], [virtual]
```

systemOnUserInput function

Author

Louis

Parameters

<i>int</i>	input
------------	-------

Returns

void

Reimplemented from [AGame](#).**4.19.2.26 systemSetState()**

```
void Snake::systemSetState (
    State ) [override], [virtual]
```

systemSetState function

Author

Louis

Parameters

<i>State</i>	state
--------------	-------

Returns

void

Reimplemented from [AGame](#).**4.19.2.27 systemStart()**

```
State Snake::systemStart ( ) [override], [virtual]
```

systemStart function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).

4.19.2.28 systemStop()

```
State Snake::systemStop ( ) [override], [virtual]
```

systemStop function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).

4.19.2.29 systemUpdate()

```
State Snake::systemUpdate ( ) [override], [virtual]
```

systemUpdate function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

State

Reimplemented from [AGame](#).

4.19.2.30 textGetAll()

```
std::vector< Text * > Snake::textGetAll ( ) [override], [virtual]
```

textGetAll function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

std::vector<Text *>

Reimplemented from [AGame](#).

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

- src/lib/games/Snake/Snake.hpp
- src/lib/games/Snake/Snake.cpp

4.20 Text Class Reference

Public Member Functions

- [~Text](#) ()
Text destructor.
- [Text](#) (std::string *)
Text constructor.
- [Text](#) (std::string *, TextType type)
Text constructor.
- [Text](#) (std::string *, std::string *)
Text constructor.
- [Text](#) (std::string *, std::string *, TextType)
Text constructor.
- [Text](#) (std::string *, std::string *, std::vector< float >)

Text constructor.

- `Text` (`std::string *`, `std::string *`, `std::vector< float >`, `TextType`)

Text constructor.

- `void setText` (`std::string *`)

setText function

- `void setFont` (`std::string *`)

setFont function

- `void setType` (`TextType`)

setType function

- `void setProperty` (`Property`, `std::vector< float >`)

setProperty function

- `std::string * getText` ()

getText function

- `std::string * getFont` ()

getFont function

- `TextType getType` ()

getType function

- `std::vector< float > getProperty` (`Property`)

getProperty function

4.20.1 Constructor & Destructor Documentation

4.20.1.1 ~Text()

```
Text::~Text ( )
```

`Text` destructor.

Author

Louis

Parameters

<code>void</code>	
-------------------	--

4.20.1.2 Text() [1/6]

```
Text::Text (
    std::string * text )
```

`Text` constructor.

Author

Louis

Parameters

<i>std::string</i>	*text
--------------------	-------

4.20.1.3 Text() [2/6]

```
Text::Text (
    std::string * text,
    TextType type )
```

[Text](#) constructor.

Author

Paul

Parameters

<i>std::string</i>	*text
<i>TextType</i>	type

4.20.1.4 Text() [3/6]

```
Text::Text (
    std::string * text,
    std::string * font )
```

[Text](#) constructor.

Author

Paul

Parameters

<i>std::string</i>	*text
<i>std::string</i>	*font

4.20.1.5 Text() [4/6]

```
Text::Text (
    std::string * text,
```

```
std::string * font,  
TextType type )
```

[Text](#) constructor.

Author

Paul

Parameters

<i>std::string</i>	*text
<i>std::string</i>	*font
<i>TextType</i>	type

4.20.1.6 Text() [5/6]

```
Text::Text (  
    std::string * text,  
    std::string * font,  
    std::vector< float > position )
```

[Text](#) constructor.

Author

Paul

Parameters

<i>std::string</i>	*text
<i>std::string</i>	*font
<i>std::vector<float></i>	position

4.20.1.7 Text() [6/6]

```
Text::Text (  
    std::string * text,  
    std::string * font,  
    std::vector< float > position,  
    TextType type )
```

[Text](#) constructor.

Author

Paul

Parameters

<i>std::string</i>	*text
<i>std::string</i>	*font
<i>std::vector<float></i>	position
<i>TextType</i>	type

4.20.2 Member Function Documentation

4.20.2.1 getFont()

```
std::string * Text::getFont ( )
```

getFont function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

std::string *

4.20.2.2 getProperty()

```
std::vector< float > Text::getProperty (
    Property property )
```

getProperty function

Author

Paul

Parameters

<i>Property</i>	property
-----------------	----------

Returns

`std::vector<float>`

4.20.2.3 getText()

```
std::string * Text::getText ( )
```

getText function

Author

Louis

Parameters

<i>void</i>	
-------------	--

Returns

`std::string *`

4.20.2.4 getType()

```
TextType Text::getType ( )
```

getType function

Author

Paul

Parameters

<i>void</i>	
-------------	--

Returns

`TextType`

4.20.2.5 setFont()

```
void Text::setFont (
    std::string * font )
```

setFont function

Author

Paul

Parameters

<i>std::string</i>	*font
--------------------	-------

Returns

void

4.20.2.6 setProperty()

```
void Text::setProperty (
    Property property,
    std::vector< float > value )
```

setProperty function

Author

Paul

Parameters

<i>Property</i>	property
<i>std::vector<float></i>	value

Returns

void

4.20.2.7 setText()

```
void Text::setText (
    std::string * text )
```

setText function

Author

Louis

Parameters

<code>std::string</code>	<code>*text</code>
--------------------------	--------------------

Returns

void

4.20.2.8 setType()

```
void Text::setType (
    TextType type )
```

setType function

Author

Paul

Parameters

<code>TextType</code>	<code>type</code>
-----------------------	-------------------

Returns

void

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

- `src/lib/games/Text.hpp`
- `src/lib/games/Text.cpp`

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