SDL Overview

1.0

Generated by Doxygen 1.9.6

1 SDL Overview 1

1.0.1 Installation . . . 1

1.0.2 Documentation . . . 1

1.0.3 Contributing . . . 2

1.0.4 License . . . 2

1.0.5 Acknowledgments . . . 2

2 Class Index 3

2.1 Class List . . . 3

3 File Index 5

3.1 File List . . . 5

4 Class Documentation 7

4.1 SDLApplication Class Reference . . . 7

5 File Documentation 9

5.1 src/main.hxx File Reference . . . 9

5.1.1 Detailed Description . . . 9

5.2 main.hxx . . . 9

5.3 test/sdl_compilation.cxx File Reference . . . 10

5.3.1 Detailed Description . . . 10

5.3.2 Function Documentation . . . 10

5.3.2.1 TEST() [1/2] . . . 10

5.3.2.2 TEST() [2/2] . . . 10

Index 11

Chapter 1

SDL Overview

SDL 3.0.0 Overview

This repository provides an overview of how to connect and configure SDL 3.0.0.

1.0.1 Installation

1. Clone the repository
2. Install the required dependencies:
   - `cmake 3.25.0+`
   - `cpp compiler with cpp 23 support`
   - `ninja`
3. Compile:
   ```
   cmake --preset=Release .
   cd build/release
   cmake --build . --config Release
   ```
   For more build configurations see `CMakePresets.json`

Also, you can use an automized `build.sh` in `scripts` folder

1.0.2 Documentation

All you need is to install doxygen and run these commands:
```
doxygen .doxygen
cd scripts
sh view_docs.sh
```

It will open your default app for viewing html files

1.0.3 Contributing

If you would like to contribute to this project, feel free to fork the repository and submit a pull request with your changes. Contributions are always welcome, whether it's an improvement to the existing program or a new program in a different language.

1.0.4 License

This project is licensed under the AGPL-3.0 License — see the `LICENSE` file for details.

1.0.5 Acknowledgments

Thanks to the developers of CMake and CTest for providing the tools necessary to build and test this program. Also, thanks to the open-source community for providing resources and support for C++ development.

Chapter 2

Class Index

2.1 Class List

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

SDLApplication 7

Chapter 3

File Index

3.1 File List

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

src/main.hxx
The main file that contains the entry point for the application 9
test/sdl_compilation.cxx
Contains compilation verifying tests for SDL library 10

Chapter 4

Class Documentation

4.1 SDLApplication Class Reference

Public Member Functions

- **SDLApplication** ()

  The constructor of the SDLApplication class that initializes SDL components.
- ~**SDLApplication** ()

  The destructor of the SDLApplication class that releases the SDL components.
- void **Run** ()

  The main loop of the application that runs until it's stopped by the user.

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

- src/main.hxx
- src/main.cxx

Chapter 5

File Documentation

5.1 src/main.hxx File Reference

The main file that contains the entry point for the application.

```
#include "SDL3/SDL.h"
#include <cstdint>
#include <iostream>
```

Classes

- class SDLApplication

5.1.1 Detailed Description

The main file that contains the entry point for the application.

5.2 main.hxx

Go to the documentation of this file.

```
00001 #pragma once
00002
00003 #include "SDL3/SDL.h"
00004 #include <cstdint>
00005 #include <iostream>
00006
00007 class SDLApplication {
00008 public:
00009     SDLApplication();
00010
00011     ~SDLApplication();
00012
00013     void Run();
00014
00015 private:
00016     constexpr static uint16_t kWindowWidth_ = 640;
00017     constexpr static uint16_t kWindowHeight_ = 480;
00018
00019     SDL_Window* window_;
00020     SDL_Renderer* renderer_;
00021
00022     bool is_running_ = true;
00023 };
```

5.3 test/sdl_compilation.cxx File Reference

Contains compilation verifying tests for SDL library.

```
#include <gtest/gtest.h>
#include <SDL3/SDL.h>
#include <iostream>
```

Functions

- TEST (SDLTest, SDLVersion)

  Tests the SDL version.
- TEST (SDLTest, SDLInitialization)

  Tests the SDL initialization.
- int **main** (int argc, char **argv)

5.3.1 Detailed Description

Contains compilation verifying tests for SDL library.

5.3.2 Function Documentation

5.3.2.1 TEST() [1/2]

```
TEST (
            SDLTest ,
            SDLInitialization  )
```

Tests the SDL initialization.

Checks that SDL initializes correctly by creating a window and renderer, and then destroying them.

5.3.2.2 TEST() [2/2]

```
TEST (
            SDLTest ,
            SDLVersion  )
```

Tests the SDL version.

Checks that the compiled version of SDL matches the linked version.

Index

sdl_compilation.cxx
    TEST, 10
SDLApplication, 7
src/main.hxx, 9

TEST
    sdl_compilation.cxx, 10
test/sdl_compilation.cxx, 10