
DuiMini Documentation

0.1.0

MXWXZ

2019 03 09

1		3
2		5
2.1	CMake	5
2.2	.....	6
2.3	config	6
2.4	.....	8
2.5	.....	9
2.6	.....	10
2.7	ResPacker	12
2.8	.....	13
2.9	.....	13
2.10	.....	14

DuiMiniDirectUI

GUIGUIDuiMini

CHAPTER 1

- <https://duimini-doc.readthedocs.io>
- <https://github.com/MXWXZ/DuiMini-doc>
- Travis CI<https://travis-ci.com/MXWXZ/DuiMini>

CHAPTER 2

- Windows/Linux/OSX
- 10M
- OpenGLSFML

2.1 CMake

2.1.1

BUILD_SHARED_LIBS	OFF	TRUE
CMAKE_BUILD_TYPE	Release	
DUI_BUILD_TOOLS	ON	DUI
DUI_BUILD_TESTS	OFF	

:

2.1.2 -SFML

SFML SFML_BUILD_NETWORK SFML_BUILD_AUDIO FALSE
SFML <https://www.sfml-dev.org/tutorials/2.5/compile-with-cmake.php>

2.1.3 -googletest

INSTALL_GTEST FALSEgtest_force_shared_crt VS TRUE

2.2

DuiMiniWindows/Linux/MacOScmake3.8

- Windows 10 with Visual Studio 2017, cmake 3.13.2
- Ubuntu 18.04 with GCC 7.3.0, cmake 3.10.2
- OSX 10.14 with Apple LLVM 10.0.0, cmake 3.13.4

CI

- Windows 10 with MSBuild 15.9.20, cmake 3.12.3
- Ubuntu 16.04 with GCC 5.4.0, cmake 3.12.4
- OSX 10.13 with Apple LLVM 9.1.0, cmake 3.11.4

: OSX

issue

C++11 [cppreference](#)

2.3 config

2.3.1

:

UIConfig::LoadConfig(path);

config.xml

: root

2.3.2 DLG

dlg

```
<res type="dlg" name="main" file="xml/main.xml" />
```

- namedlg
- filexml

2.3.3

```
<style type="skin" name="default" value="skin/default" default="1" />
<style type="skin" name="testskin" value="skin/testskin" />
<style type="skin" name="system" value="skin/system" system="1" />
```

- name
- value
- system01
- default01

```
: system 1 default 0
```

2.3.4

```
:
```

DuiMini

```
<res type="lang" lang="zh-cn" file="string/zh-CN.xml" default"1" />
<res type="lang" lang="en-us" file="string/en-US.xml" />
```

- name
- filexml
- default01

2.3.5

```
<style type="font" lang="zh-cn" name="default" file="font/yahei.ttc" size="12" default"1" />
<style type="font" lang="en-us" name="default" file="font/segoe.ttc" size="12" default"1" />
```

- lang
- name
- file
- size
- default01

5	6	
5.5	7	
6.5	8	
7.5	10	
9	12	
10.5	14	
12	16	
14	18	
15	20	
16	21	
18	24	
22	29	
24	32	
26	34	
36	48	
42	56	

2.4

DuiMini UIException UI

: UISTL

: UI kEL_Error

2.4.1

kEL_Normal	
kEL_Warning	
kEL_Error	

: kEL_Error 1

2.4.2

:

- UISetError

- UIGetErrorMsgList
- UIException::SetExtraFunc
true:

```
typedef std::function<bool (int level, const char* msg)> ExtraFunc;
```

2.5

: 322G

2.5.1

DuiMini3

```
UIResource::SetResMode(kRT_File, "uires");
```

- uiress
- uiress/1.txt 1.txt

zip

```
UIResource::SetResMode(kRT_Package, "res.zip");
```

- res.zip
- res.zip uiress/1.txt uiress/1.txt

ResPacker

```
UIResource::SetResMode(kRT_Raw, "Demo.exe");
```

- Demo.exe
-

2.5.2

IUILoadFile

:

```
auto res = UIResource::LoadRes<UIRawLoader>("1.txt");
res->GetFile();           // 
test->GetFileSize();      //
```

```
class CustomLoader : public IUILoadFile {
public:
    bool LoadFile(const void* buffer, long size) override {
        // do something, DO NOT free buffer!
        return true;    // true for success
    }
};
```

:

```
auto res = UIResource::LoadRes<CustomLoader>("1.txt");
```

2.6

UIEvent Event

kEVT_MouseEnter	
kEVT_MouseLeave	
<i>kEVT_MouseMove</i>	
<i>kEVT_LButtonDown</i>	
<i>kEVT_LButtonUp</i>	
<i>kEVT_LButtonClick</i>	
<i>kEVT_LButtonDBClick</i>	
<i>kEVT_RButtonDown</i>	
<i>kEVT_RButtonUp</i>	
<i>kEVT_RButtonClick</i>	
<i>kEVT_RButtonDBClick</i>	
kEVT_Disable	
kEVT_Active	
kEVT_Invisible	
kEVT_Visible	
<i>kEVT_SkinChange</i>	
<i>kEVT_LangChange</i>	

: kEVT_Active kEVT_Visible 0

```
: kEVT_MouseEnter
```

2.6.1 kEVT_MouseMove

-
- API

```
void SetPos(Point v_pt)  
Point GetPos() const
```

2.6.2 kEVT_LButtonDown

- *kEVT_MouseMove*

2.6.3 kEVT_LButtonUp

- *kEVT_MouseMove*

2.6.4 kEVT_LButtonClick

- *kEVT_MouseMove*

2.6.5 kEVT_LButtonDBClick

- *kEVT_MouseMove*

2.6.6 kEVT_RButtonDown

- *kEVT_MouseMove*

2.6.7 kEVT_RButtonUp

- *kEVT_MouseMove*

2.6.8 kEVT_RButtonClick

- *kEVT_MouseMove*

2.6.9 kEVT_RButtonDBClick

- *kEVT_MouseMove*

2.6.10 kEVT_SkinChange

- ID
- API

```
void SetRes(ResChangeEvent res)
ResChangeEvent GetRes() const
```

2.6.11 kEVT_LangChange

- *kEVT_SkinChange*

2.7 ResPacker

CLI:

```
ResPacker [OPTION...] [exefile] [zipfile]
```

```
-h, --help
--nobackup
-u, --unpack
```

```
:
```

2.7.1

1. zip
- 2.
3. ResPacker exefile_path zipfile_path

2.7.2

1. ResPacker -u exefile_path
2. .src zip .zip

2.7.3

zip

```
[]  
["UI"] 0x55, 0x49  
[zip] 4/8  
[zip]  
[] 4/8
```

zip

2.8

2.8.1 DUImini

- git
- cmake
- Visual Studio/Visual Studio Code/Other editors

2.8.2 DUImini-doc

- git
- sphinx-doc
- sphinx_rtd_theme
- Visual Studio Code/Other editors

2.9

2.9.1

- UTF-8ASCII
- LFgit autocrlf = true

2.9.2

- Google
- clang formatVS Enable ClangFormat support VSC
- Doxygen

2.9.3

- C++
- UIException

2.9.4

-
- long

2.9.5

-
-

2.9.6

-

2.9.7

- boost
- GPL/
- DUImini
- cmake

2.10

2.10.1 cxxopts

Copyright (c) 2014 Jarryd Beck

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the “Software”), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

2.10.2 googletest

Copyright 2008, Google Inc.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS “AS IS” AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT

SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

2.10.3 miniz

Copyright 2013-2014 RAD Game Tools and Valve Software

Copyright 2010-2014 Rich Geldreich and Tenacious Software LLC

All Rights Reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the “Software”), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

2.10.4 pugixml

pugixml 1.9 - an XML processing library

Copyright (C) 2006-2018, by Arseny Kapoulkine (arseny.kapoulkine@gmail.com) Report bugs and download new versions at <http://pugixml.org/>

This is the distribution of pugixml, which is a C++ XML processing library, which consists of a DOM-like interface with rich traversal/modification capabilities, an extremely fast XML parser which constructs the DOM tree from an XML file/buffer, and an XPath 1.0 implementation for complex data-driven tree queries. Full Unicode support is also available, with Unicode interface variants and conversions between different Unicode encodings (which happen automatically during parsing/saving).

The distribution contains the following folders:

```
contrib/ - various contributions to pugixml
docs/ - documentation
    docs/samples - pugixml usage examples
    docs/quickstart.html - quick start guide
    docs/manual.html - complete manual
scripts/ - project files for IDE/build systems
src/ - header and source files
readme.txt - this file.
```

This library is distributed under the MIT License:

Copyright (c) 2006-2018 Arseny Kapoulkine

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the “Software”), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

2.10.5 SFML

SFML - Copyright (C) 2007-2018 Laurent Gomila - laurent@sfml-dev.org

This software is provided ‘as-is’, without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

External libraries used by SFML

- *OpenAL-Soft* is under the LGPL license
- *stb_image* and *stb_image_write* are public domain
- *freetype* is under the FreeType license or the GPL license
- *libogg* is under the BSD license
- *libvorbis* is under the BSD license
- *libflac* is under the BSD license

DuiMini

cxxopts	2.1.2	MIT
googletest	1.8.1	BSD-3-Clause
miniz	2.0.8	MIT
pugixml	1.9	MIT
SFML	2.5.1	zlib