My Project

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

Chapter 3

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3.1 File List

Here is a list of all files with brief descriptions:

Chapter 4

Class Documentation

4.1 Circle Class Reference

`#include <drawtools.h>`

Inheritance diagram for Circle:

Collaboration diagram for Circle:

Public Member Functions

- **Circle** (const **PointF** &position, const **Color** &color, float radius, int segments)
- void **draw** () const override
- void **print** () const override

4.1.1 Constructor & Destructor Documentation

4.1.1.1 Circle::Circle (const PointF & *position,* const Color & *color,* float *radius,* int *segments*)

4.1.2 Member Function Documentation

4.1.2.1 void Circle::draw ( ) const [override], [virtual]

Implements **Drawable** (p. 9).

Here is the call graph for this function:

4.1.2.2 void Circle::print ( ) const [override], [virtual]

Implements **Drawable** (p. 9).

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

- OpenGLSkeleton/**drawtools.h**
- OpenGLSkeleton/**drawtools.cpp**

4.2 Color Struct Reference

`#include <drawtools.h>`

Public Member Functions

- **Color** ()=default
- **Color** (float red, float green, float blue)
- float & **r** ()
- const float & **r** () const
- float & **g** ()
- const float & **g** () const
- float & **b** ()
- const float & **b** () const
- float & **operator[ ]** (int i)
- const float & **operator[ ]** (int i) const
- float ∗ **data** ()
- const float ∗ **data** () const

4.2.1 Constructor & Destructor Documentation

4.2.1.1 Color::Color ( ) [default]

4.2.1.2 Color::Color (float *red,* float *green,* float *blue*) [inline]

4.2.2 Member Function Documentation

4.2.2.1 float& Color::b ( ) [inline]

4.2.2.2 const float& Color::b ( ) const [inline]

4.2.2.3 float∗ Color::data ( ) [inline]

Here is the caller graph for this function:

4.2.2.4 const float∗ Color::data ( ) const [inline]

4.2.2.5 float& Color::g ( ) [inline]

4.2.2.6 const float& Color::g ( ) const [inline]

4.2.2.7 float& Color::operator[ ] (int *i*) [inline]

4.2.2.8 const float& Color::operator[ ] (int *i*) const [inline]

4.2.2.9 float& Color::r ( ) [inline]

4.2.2.10 const float& Color::r ( ) const [inline]

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

- OpenGLSkeleton/**drawtools.h**

4.3 Drawable Class Reference

`#include <drawlist.h>`

Inheritance diagram for Drawable:

Public Member Functions

- **Drawable** ()=default
- **Drawable** (const std::string &**name**)
- virtual ∼**Drawable** ()=default
- virtual void **draw** () const =0
- virtual void **print** () const =0
- const std::string & **name** () const

4.3.1 Constructor & Destructor Documentation

4.3.1.1 Drawable::Drawable ( ) [default]

4.3.1.2 Drawable::Drawable (const std::string & *name*)

4.3.1.3 virtual Drawable::∼Drawable ( ) [virtual], [default]

4.3.2 Member Function Documentation

4.3.2.1 virtual void Drawable::draw ( ) const [pure virtual]

Implemented in **Text** (p. 16), **Sqaure** (p. 15), **Circle** (p. 7), **Line** (p. 12), and **Pixel** (p. 13).

4.3.2.2 const std::string & Drawable::name ( ) const

4.3.2.3 virtual void Drawable::print ( ) const [pure virtual]

Implemented in **Text** (p. 16), **Sqaure** (p. 15), **Circle** (p. 7), **Line** (p. 12), and **Pixel** (p. 13).

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

- OpenGLSkeleton/**drawlist.h**
- OpenGLSkeleton/**drawlist.cpp**

4.4 Enemy Class Reference

`#include <Enemy.h>`

Collaboration diagram for Enemy:

Public Member Functions

- **Enemy** (const **PointF** &begin, **PointF** current, float speed, int health)
- void **Health** (int i)
- virtual **PointF Move** (int i, int j)
- int **Update** (**PointF** current)
- **PointF Value** ()

Public Attributes

- **PointF _begin**
- **PointF _current**
- int **_health**
- int **_id**
- float **_speed**

4.4.1 Constructor & Destructor Documentation

4.4.1.1 Enemy::Enemy (const PointF & *begin,* PointF *current,* float *speed,* int *health*)

4.4.2 Member Function Documentation

4.4.2.1 void Enemy::Health (int *i*)

4.4.2.2 PointF Enemy::Move (int *i,* int *j*) [virtual]

Here is the call graph for this function:

Here is the caller graph for this function:

4.4.2.3 int Enemy::Update (PointF *current*)

4.4.2.4 PointF Enemy::Value ( )

4.4.3 Member Data Documentation

4.4.3.1 PointF Enemy::_begin

4.4.3.2 PointF Enemy::_current

4.4.3.3 int Enemy::_health

4.4.3.4 int Enemy::_id

4.4.3.5 float Enemy::_speed

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

- OpenGLSkeleton/**Enemy.h**
- OpenGLSkeleton/**Enemy.cpp**

4.5 FiredBullet Class Reference

`#include <FiredBullet.h>`

Collaboration diagram for FiredBullet:

Public Member Functions

- **FiredBullet** (**PointF** destination, **PointF** begin, **PointF** current, int speed)
- **PointF Move** ()
- **PointF Move2** ()
- void **Update** (**PointF** begin)
- void **Update2** (**PointF** begin)

Public Attributes

- **PointF _begin**
- **PointF _destination**
- **PointF _current**
- int **_speed**
- int **_id**

4.5.1 Constructor & Destructor Documentation

4.5.1.1 FiredBullet::FiredBullet (PointF *destination,* PointF *begin,* PointF *current,* int *speed*)

4.5.2 Member Function Documentation

4.5.2.1 PointF FiredBullet::Move ( )

4.5.2.2 PointF FiredBullet::Move2 ( )

4.5.2.3 void FiredBullet::Update (PointF *begin*)

4.5.2.4 void FiredBullet::Update2 (PointF *begin*)

4.5.3 Member Data Documentation

4.5.3.1 PointF FiredBullet::_begin

4.5.3.2 PointF FiredBullet::_current

4.5.3.3 PointF FiredBullet::_destination

4.5.3.4 int FiredBullet::_id

4.5.3.5 int FiredBullet::_speed

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

- OpenGLSkeleton/**FiredBullet.h**
- OpenGLSkeleton/**FiredBullet.cpp**

4.6 Line Class Reference

`#include <drawtools.h>`

Inheritance diagram for Line:

Collaboration diagram for Line:

Public Member Functions

- **Line** (const **PointF** &**begin**, const **PointF** &**end**, const **Color** &color, float lineWidth)
- const **PointF** & **begin** () const
- const **PointF** & **end** () const
- void **draw** () const override
- void **print** () const override

4.6.1 Constructor & Destructor Documentation

4.6.1.1 Line::Line (const PointF & *begin,* const PointF & *end,* const Color & *color,* float *lineWidth*)

Here is the call graph for this function:

4.6.2 Member Function Documentation

4.6.2.1 const PointF & Line::begin ( ) const

4.6.2.2 void Line::draw ( ) const [override], [virtual]

Implements **Drawable** (p. 9).

Here is the call graph for this function:

4.6.2.3 const PointF & Line::end ( ) const

Here is the caller graph for this function:

4.6.2.4 void Line::print ( ) const [override], [virtual]

Implements **Drawable** (p. 9).

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

- OpenGLSkeleton/**drawtools.h**
- OpenGLSkeleton/**drawtools.cpp**

4.7 Pixel Class Reference

`#include <drawtools.h>`

Inheritance diagram for Pixel:

Collaboration diagram for Pixel:

Public Member Functions

- **Pixel** (const **PointF** &position, const **Color** &color)
- void **draw** () const override
- void **print** () const override

4.7.1 Constructor & Destructor Documentation

4.7.1.1 Pixel::Pixel (const PointF & *position,* const Color & *color*)

4.7.2 Member Function Documentation

4.7.2.1 void Pixel::draw ( ) const [override], [virtual]

Implements **Drawable** (p. 9).

Here is the call graph for this function:

4.7.2.2 void Pixel::print ( ) const [override], [virtual]

Implements **Drawable** (p. 9).

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

- OpenGLSkeleton/**drawtools.h**
- OpenGLSkeleton/**drawtools.cpp**

4.8 Point< T > Class Template Reference

`#include <drawtools.h>`

Public Member Functions

- **Point** ()=default
- **Point** (const T &**x**, const T &**y**)
- T & **x** ()
- const T & **x** () const
- T & **y** ()
- const T & **y** () const
- T & **operator[ ]** (int i)
- const T & **operator[ ]** (int i) const
- T * **data** ()
- const T * **data** () const

4.8.1 Constructor & Destructor Documentation

4.8.1.1 template<typename T> Point< T >::Point ( ) [default]

4.8.1.2 template<typename T> Point< T >::Point (const T & *x*, const T & *y*) [inline]

4.8.2 Member Function Documentation

4.8.2.1 template<typename T> T* Point< T >::data ( ) [inline]

Here is the caller graph for this function:

4.8.2.2 template<typename T> const T* Point< T >::data ( ) const [inline]

4.8.2.3 template<typename T> T& Point< T >::operator[ ] (int *i*) [inline]

4.8.2.4 template<typename T> const T& Point< T >::operator[ ] (int *i*) const [inline]

4.8.2.5 template<typename T> T& Point< T >::x ( ) [inline]

Here is the caller graph for this function:

4.8.2.6 template<typename T> const T& Point< T >::x ( ) const [inline]

4.8.2.7 template<typename T> T& Point< T >::y ( ) [inline]

Here is the caller graph for this function:

4.8.2.8 template<typename T> const T& Point< T >::y ( ) const [inline]

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

- OpenGLSkeleton/**drawtools.h**

4.9 Sqaure Class Reference

`#include <drawtools.h>`

Inheritance diagram for Sqaure:

Collaboration diagram for Sqaure:

Public Member Functions

- **Sqaure** (const **PointF** &begin, const **PointF** &end, const **PointF** &begin2, const **PointF** &end2, const **Color** &color)
- void **draw** () const override
- void **print** () const override

4.9.1 Constructor & Destructor Documentation

4.9.1.1 Sqaure::Sqaure (const PointF & *begin,* const PointF & *end,* const PointF & *begin2,* const PointF & *end2,* const Color & *color*)

4.9.2 Member Function Documentation

4.9.2.1 void Sqaure::draw ( ) const [override], [virtual]

Implements **Drawable** (p. 9).

Here is the call graph for this function:

4.9.2.2 void Sqaure::print ( ) const [override], [virtual]

Implements **Drawable** (p. 9).

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

- OpenGLSkeleton/**drawtools.h**
- OpenGLSkeleton/**drawtools.cpp**

4.10 Text Class Reference

```
#include <drawtools.h>
```

Inheritance diagram for Text:

Collaboration diagram for Text:

Public Member Functions

- **Text** (const std::string &str)
- void **draw** () const override
- void **print** () const override

4.10.1 Constructor & Destructor Documentation

4.10.1.1 Text::Text (const std::string & *str*)

4.10.2 Member Function Documentation

4.10.2.1 void Text::draw ( ) const [override], [virtual]

Implements **Drawable** (p. 9).

4.10.2.2 void Text::print ( ) const [override], [virtual]

Implements **Drawable** (p. 9).

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

- OpenGLSkeleton/**drawtools.h**
- OpenGLSkeleton/**drawtools.cpp**

4.11 Turret Class Reference

`#include <Turret.h>`

Collaboration diagram for Turret:

Public Member Functions

- **Turret** (**PointF** position, **Color** color, int range, int health, int upgrade, int type)
- int **Aim** (int i)
- **PointF Position** ()

Public Attributes

- **PointF _position**
- int **_upgrade**
- int **_type**
- int **_range**
- int **_health**
- int **_bulletSpeed**
- int **_aiming** = 0

4.11.1 Constructor & Destructor Documentation

4.11.1.1 Turret::Turret (PointF *position,* Color *color,* int *range,* int *health,* int *upgrade,* int *type*)

4.11.2 Member Function Documentation

4.11.2.1 int Turret::Aim (int *i*)

4.11.2.2 PointF Turret::Position ( )

4.11.3 Member Data Documentation

4.11.3.1 int Turret::_aiming = 0

4.11.3.2 int Turret::_bulletSpeed

4.11.3.3 int Turret::_health

4.11.3.4 PointF Turret::_position

4.11.3.5 int Turret::_range

4.11.3.6 int Turret::_type

4.11.3.7 int Turret::_upgrade

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

- OpenGLSkeleton/**Turret.h**
- OpenGLSkeleton/**Turret.cpp**

Chapter 5

File Documentation

5.1 OpenGLSkeleton/drawlist.cpp File Reference

```
#include "drawlist.h"
#include <algorithm>
#include <iterator>
```

Include dependency graph for drawlist.cpp:

Functions

- DrawList::iterator **findDrawable** (**DrawList** &list, const std::string &name)

5.1.1 Function Documentation

5.1.1.1 DrawList::iterator findDrawable (DrawList & *list,* const std::string & *name*)

5.2 OpenGLSkeleton/drawlist.h File Reference

```
#include <string>
#include <list>
```

Include dependency graph for drawlist.h: This graph shows which files directly or indirectly include this file:

Classes

- class **Drawable**

Typedefs

- using **DrawList** = std::list< **Drawable** * >

Functions

- DrawList::iterator **findDrawable** (**DrawList** &list, const std::string &name)

5.2.1 Typedef Documentation

5.2.1.1 using DrawList = std::list<Drawable*>

5.2.2 Function Documentation

5.2.2.1 DrawList::iterator findDrawable (DrawList & *list,* const std::string & *name*)

5.3 OpenGLSkeleton/drawtools.cpp File Reference

```
#include <iostream>
#include <iomanip>
#include "glut.h"
#include "drawtools.h"
#include <math.h>
```

Include dependency graph for drawtools.cpp:

Macros

- #define **_USE_MATH_DEFINES**

5.3.1 Macro Definition Documentation

5.3.1.1 #define _USE_MATH_DEFINES

5.4 OpenGLSkeleton/drawtools.h File Reference

```
#include <array>
#include "drawlist.h"
```

Include dependency graph for drawtools.h: This graph shows which files directly or indirectly include this file:

Classes

- class **Point**< **T** >
- struct **Color**
- class **Pixel**
- class **Line**
- class **Circle**
- class **Sqaure**
- class **Text**

Typedefs

- using **PointI** = **Point**< int >
- using **PointF** = **Point**< float >

5.4.1 Typedef Documentation

5.4.1.1 using PointF = Point<float>

5.4.1.2 using PointI = Point<int>

5.5 OpenGLSkeleton/Enemy.cpp File Reference

```
#include "Enemy.h"
#include <iostream>
```

Include dependency graph for Enemy.cpp:

Variables

- int **Count** = 1

5.5.1 Variable Documentation

5.5.1.1 int Count = 1

5.6 OpenGLSkeleton/Enemy.h File Reference

```
#include <array>
#include "drawtools.h"
```

Include dependency graph for Enemy.h: This graph shows which files directly or indirectly include this file:

Classes

- class **Enemy**

5.7 OpenGLSkeleton/FiredBullet.cpp File Reference

```
#include "FiredBullet.h"
#include <iostream>
#include <string>
```

Include dependency graph for FiredBullet.cpp:

Variables

- int **Count2** = 0

5.7.1 Variable Documentation

5.7.1.1 int Count2 = 0

5.8 OpenGLSkeleton/FiredBullet.h File Reference

```
#include "drawtools.h"
```
Include dependency graph for FiredBullet.h: This graph shows which files directly or indirectly include this file:

Classes

- class **FiredBullet**

Macros

- #define **FIREDBULLET_H**

5.8.1 Macro Definition Documentation

5.8.1.1 #define FIREDBULLET_H

5.9 OpenGLSkeleton/glut.h File Reference

```
#include <GL/gl.h>
#include <GL/glu.h>
```
Include dependency graph for glut.h: This graph shows which files directly or indirectly include this file:

Macros

- #define **APIENTRY**
- #define **GLUT_APIENTRY_DEFINED**
- #define **CALLBACK**
- #define **GLUTAPI** extern
- #define **GLUTCALLBACK**
- #define **GLUT_API_VERSION** 3
- #define **GLUT_XLIB_IMPLEMENTATION** 15
- #define **GLUT_RGB** 0
- #define **GLUT_RGBA GLUT_RGB**
- #define **GLUT_INDEX** 1
- #define **GLUT_SINGLE** 0
- #define **GLUT_DOUBLE** 2
- #define **GLUT_ACCUM** 4

- #define **GLUT_ALPHA** 8
- #define **GLUT_DEPTH** 16
- #define **GLUT_STENCIL** 32
- #define **GLUT_MULTISAMPLE** 128
- #define **GLUT_STEREO** 256
- #define **GLUT_LUMINANCE** 512
- #define **GLUT_LEFT_BUTTON** 0
- #define **GLUT_MIDDLE_BUTTON** 1
- #define **GLUT_RIGHT_BUTTON** 2
- #define **GLUT_WHEEL_UP** 3
- #define **GLUT_WHEEL_DOWN** 4
- #define **GLUT_XBUTTON1** 5
- #define **GLUT_XBUTTON2** 6
- #define **GLUT_DOWN** 0
- #define **GLUT_UP** 1
- #define **GLUT_KEY_F1** 1
- #define **GLUT_KEY_F2** 2
- #define **GLUT_KEY_F3** 3
- #define **GLUT_KEY_F4** 4
- #define **GLUT_KEY_F5** 5
- #define **GLUT_KEY_F6** 6
- #define **GLUT_KEY_F7** 7
- #define **GLUT_KEY_F8** 8
- #define **GLUT_KEY_F9** 9
- #define **GLUT_KEY_F10** 10
- #define **GLUT_KEY_F11** 11
- #define **GLUT_KEY_F12** 12
- #define **GLUT_KEY_LEFT** 100
- #define **GLUT_KEY_UP** 101
- #define **GLUT_KEY_RIGHT** 102
- #define **GLUT_KEY_DOWN** 103
- #define **GLUT_KEY_PAGE_UP** 104
- #define **GLUT_KEY_PAGE_DOWN** 105
- #define **GLUT_KEY_HOME** 106
- #define **GLUT_KEY_END** 107
- #define **GLUT_KEY_INSERT** 108
- #define **GLUT_LEFT** 0
- #define **GLUT_ENTERED** 1
- #define **GLUT_MENU_NOT_IN_USE** 0
- #define **GLUT_MENU_IN_USE** 1
- #define **GLUT_NOT_VISIBLE** 0
- #define **GLUT_VISIBLE** 1
- #define **GLUT_HIDDEN** 0
- #define **GLUT_FULLY_RETAINED** 1
- #define **GLUT_PARTIALLY_RETAINED** 2
- #define **GLUT_FULLY_COVERED** 3
- #define **GLUT_RED** 0
- #define **GLUT_GREEN** 1
- #define **GLUT_BLUE** 2
- #define **GLUT_STROKE_ROMAN** (&**glutStrokeRoman**)
- #define **GLUT_STROKE_MONO_ROMAN** (&**glutStrokeMonoRoman**)
- #define **GLUT_BITMAP_9_BY_15** (&**glutBitmap9By15**)
- #define **GLUT_BITMAP_8_BY_13** (&**glutBitmap8By13**)
- #define **GLUT_BITMAP_TIMES_ROMAN_10** (&**glutBitmapTimesRoman10**)
- #define **GLUT_BITMAP_TIMES_ROMAN_24** (&**glutBitmapTimesRoman24**)

- #define **GLUT_BITMAP_HELVETICA_10** (&**glutBitmapHelvetica10**)
- #define **GLUT_BITMAP_HELVETICA_12** (&**glutBitmapHelvetica12**)
- #define **GLUT_BITMAP_HELVETICA_18** (&**glutBitmapHelvetica18**)
- #define **GLUT_WINDOW_X** ((GLenum) 100)
- #define **GLUT_WINDOW_Y** ((GLenum) 101)
- #define **GLUT_WINDOW_WIDTH** ((GLenum) 102)
- #define **GLUT_WINDOW_HEIGHT** ((GLenum) 103)
- #define **GLUT_WINDOW_BUFFER_SIZE** ((GLenum) 104)
- #define **GLUT_WINDOW_STENCIL_SIZE** ((GLenum) 105)
- #define **GLUT_WINDOW_DEPTH_SIZE** ((GLenum) 106)
- #define **GLUT_WINDOW_RED_SIZE** ((GLenum) 107)
- #define **GLUT_WINDOW_GREEN_SIZE** ((GLenum) 108)
- #define **GLUT_WINDOW_BLUE_SIZE** ((GLenum) 109)
- #define **GLUT_WINDOW_ALPHA_SIZE** ((GLenum) 110)
- #define **GLUT_WINDOW_ACCUM_RED_SIZE** ((GLenum) 111)
- #define **GLUT_WINDOW_ACCUM_GREEN_SIZE** ((GLenum) 112)
- #define **GLUT_WINDOW_ACCUM_BLUE_SIZE** ((GLenum) 113)
- #define **GLUT_WINDOW_ACCUM_ALPHA_SIZE** ((GLenum) 114)
- #define **GLUT_WINDOW_DOUBLEBUFFER** ((GLenum) 115)
- #define **GLUT_WINDOW_RGBA** ((GLenum) 116)
- #define **GLUT_WINDOW_PARENT** ((GLenum) 117)
- #define **GLUT_WINDOW_NUM_CHILDREN** ((GLenum) 118)
- #define **GLUT_WINDOW_COLORMAP_SIZE** ((GLenum) 119)
- #define **GLUT_WINDOW_NUM_SAMPLES** ((GLenum) 120)
- #define **GLUT_WINDOW_STEREO** ((GLenum) 121)
- #define **GLUT_WINDOW_CURSOR** ((GLenum) 122)
- #define **GLUT_SCREEN_WIDTH** ((GLenum) 200)
- #define **GLUT_SCREEN_HEIGHT** ((GLenum) 201)
- #define **GLUT_SCREEN_WIDTH_MM** ((GLenum) 202)
- #define **GLUT_SCREEN_HEIGHT_MM** ((GLenum) 203)
- #define **GLUT_MENU_NUM_ITEMS** ((GLenum) 300)
- #define **GLUT_DISPLAY_MODE_POSSIBLE** ((GLenum) 400)
- #define **GLUT_INIT_WINDOW_X** ((GLenum) 500)
- #define **GLUT_INIT_WINDOW_Y** ((GLenum) 501)
- #define **GLUT_INIT_WINDOW_WIDTH** ((GLenum) 502)
- #define **GLUT_INIT_WINDOW_HEIGHT** ((GLenum) 503)
- #define **GLUT_INIT_DISPLAY_MODE** ((GLenum) 504)
- #define **GLUT_ELAPSED_TIME** ((GLenum) 700)
- #define **GLUT_WINDOW_FORMAT_ID** ((GLenum) 123)
- #define **GLUT_HAS_KEYBOARD** ((GLenum) 600)
- #define **GLUT_HAS_MOUSE** ((GLenum) 601)
- #define **GLUT_HAS_SPACEBALL** ((GLenum) 602)
- #define **GLUT_HAS_DIAL_AND_BUTTON_BOX** ((GLenum) 603)
- #define **GLUT_HAS_TABLET** ((GLenum) 604)
- #define **GLUT_NUM_MOUSE_BUTTONS** ((GLenum) 605)
- #define **GLUT_NUM_SPACEBALL_BUTTONS** ((GLenum) 606)
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- #define **GLUT_JOYSTICK_POLL_RATE** ((GLenum) 616)
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- #define **GLUT_LAYER_IN_USE** ((GLenum) 801)
- #define **GLUT_HAS_OVERLAY** ((GLenum) 802)
- #define **GLUT_TRANSPARENT_INDEX** ((GLenum) 803)
- #define **GLUT_NORMAL_DAMAGED** ((GLenum) 804)
- #define **GLUT_OVERLAY_DAMAGED** ((GLenum) 805)
- #define **GLUT_VIDEO_RESIZE_POSSIBLE** ((GLenum) 900)
- #define **GLUT_VIDEO_RESIZE_IN_USE** ((GLenum) 901)
- #define **GLUT_VIDEO_RESIZE_X_DELTA** ((GLenum) 902)
- #define **GLUT_VIDEO_RESIZE_Y_DELTA** ((GLenum) 903)
- #define **GLUT_VIDEO_RESIZE_WIDTH_DELTA** ((GLenum) 904)
- #define **GLUT_VIDEO_RESIZE_HEIGHT_DELTA** ((GLenum) 905)
- #define **GLUT_VIDEO_RESIZE_X** ((GLenum) 906)
- #define **GLUT_VIDEO_RESIZE_Y** ((GLenum) 907)
- #define **GLUT_VIDEO_RESIZE_WIDTH** ((GLenum) 908)
- #define **GLUT_VIDEO_RESIZE_HEIGHT** ((GLenum) 909)
- #define **GLUT_NORMAL** ((GLenum) 0)
- #define **GLUT_OVERLAY** ((GLenum) 1)
- #define **GLUT_ACTIVE_SHIFT** 1
- #define **GLUT_ACTIVE_CTRL** 2
- #define **GLUT_ACTIVE_ALT** 4
- #define **GLUT_CURSOR_RIGHT_ARROW** 0
- #define **GLUT_CURSOR_LEFT_ARROW** 1
- #define **GLUT_CURSOR_INFO** 2
- #define **GLUT_CURSOR_DESTROY** 3
- #define **GLUT_CURSOR_HELP** 4
- #define **GLUT_CURSOR_CYCLE** 5
- #define **GLUT_CURSOR_SPRAY** 6
- #define **GLUT_CURSOR_WAIT** 7
- #define **GLUT_CURSOR_TEXT** 8
- #define **GLUT_CURSOR_CROSSHAIR** 9
- #define **GLUT_CURSOR_UP_DOWN** 10
- #define **GLUT_CURSOR_LEFT_RIGHT** 11
- #define **GLUT_CURSOR_TOP_SIDE** 12
- #define **GLUT_CURSOR_BOTTOM_SIDE** 13
- #define **GLUT_CURSOR_LEFT_SIDE** 14
- #define **GLUT_CURSOR_RIGHT_SIDE** 15
- #define **GLUT_CURSOR_TOP_LEFT_CORNER** 16
- #define **GLUT_CURSOR_TOP_RIGHT_CORNER** 17
- #define **GLUT_CURSOR_BOTTOM_RIGHT_CORNER** 18
- #define **GLUT_CURSOR_BOTTOM_LEFT_CORNER** 19
- #define **GLUT_CURSOR_INHERIT** 100
- #define **GLUT_CURSOR_NONE** 101
- #define **GLUT_CURSOR_FULL_CROSSHAIR** 102
- #define **GLUT_KEY_REPEAT_OFF** 0
- #define **GLUT_KEY_REPEAT_ON** 1
- #define **GLUT_KEY_REPEAT_DEFAULT** 2
- #define **GLUT_JOYSTICK_BUTTON_A** 1
- #define **GLUT_JOYSTICK_BUTTON_B** 2
- #define **GLUT_JOYSTICK_BUTTON_C** 4
- #define **GLUT_JOYSTICK_BUTTON_D** 8
- #define **GLUT_GAME_MODE_ACTIVE** ((GLenum) 0)
- #define **GLUT_GAME_MODE_POSSIBLE** ((GLenum) 1)
- #define **GLUT_GAME_MODE_WIDTH** ((GLenum) 2)

- #define **GLUT_GAME_MODE_HEIGHT** ((GLenum) 3)
- #define **GLUT_GAME_MODE_PIXEL_DEPTH** ((GLenum) 4)
- #define **GLUT_GAME_MODE_REFRESH_RATE** ((GLenum) 5)
- #define **GLUT_GAME_MODE_DISPLAY_CHANGED** ((GLenum) 6)

Functions

- void **exit** (int)
- **GLUTAPI** void **APIENTRY glutInit** (int ∗argcp, char ∗∗argv)
- **GLUTAPI** void **APIENTRY glutInitDisplayMode** (unsigned int mode)
- **GLUTAPI** void **APIENTRY glutInitDisplayString** (const char ∗string)
- **GLUTAPI** void **APIENTRY glutInitWindowPosition** (int x, int y)
- **GLUTAPI** void **APIENTRY glutInitWindowSize** (int width, int height)
- **GLUTAPI** void **APIENTRY glutMainLoop** (void)
- **GLUTAPI** int **APIENTRY glutCreateWindow** (const char ∗title)
- **GLUTAPI** int **APIENTRY glutCreateSubWindow** (int win, int x, int y, int width, int height)
- **GLUTAPI** void **APIENTRY glutDestroyWindow** (int win)
- **GLUTAPI** void **APIENTRY glutPostRedisplay** (void)
- **GLUTAPI** void **APIENTRY glutPostWindowRedisplay** (int win)
- **GLUTAPI** void **APIENTRY glutSwapBuffers** (void)
- **GLUTAPI** int **APIENTRY glutGetWindow** (void)
- **GLUTAPI** void **APIENTRY glutSetWindow** (int win)
- **GLUTAPI** void **APIENTRY glutSetWindowTitle** (const char ∗title)
- **GLUTAPI** void **APIENTRY glutSetIconTitle** (const char ∗title)
- **GLUTAPI** void **APIENTRY glutPositionWindow** (int x, int y)
- **GLUTAPI** void **APIENTRY glutReshapeWindow** (int width, int height)
- **GLUTAPI** void **APIENTRY glutPopWindow** (void)
- **GLUTAPI** void **APIENTRY glutPushWindow** (void)
- **GLUTAPI** void **APIENTRY glutIconifyWindow** (void)
- **GLUTAPI** void **APIENTRY glutShowWindow** (void)
- **GLUTAPI** void **APIENTRY glutHideWindow** (void)
- **GLUTAPI** void **APIENTRY glutFullScreen** (void)
- **GLUTAPI** void **APIENTRY glutSetCursor** (int cursor)
- **GLUTAPI** void **APIENTRY glutWarpPointer** (int x, int y)
- **GLUTAPI** void **APIENTRY glutEstablishOverlay** (void)
- **GLUTAPI** void **APIENTRY glutRemoveOverlay** (void)
- **GLUTAPI** void **APIENTRY glutUseLayer** (GLenum layer)
- **GLUTAPI** void **APIENTRY glutPostOverlayRedisplay** (void)
- **GLUTAPI** void **APIENTRY glutPostWindowOverlayRedisplay** (int win)
- **GLUTAPI** void **APIENTRY glutShowOverlay** (void)
- **GLUTAPI** void **APIENTRY glutHideOverlay** (void)
- **GLUTAPI** int **APIENTRY glutCreateMenu** (void(**GLUTCALLBACK** ∗func)(int))
- **GLUTAPI** void **APIENTRY glutDestroyMenu** (int menu)
- **GLUTAPI** int **APIENTRY glutGetMenu** (void)
- **GLUTAPI** void **APIENTRY glutSetMenu** (int menu)
- **GLUTAPI** void **APIENTRY glutAddMenuEntry** (const char ∗label, int value)
- **GLUTAPI** void **APIENTRY glutAddSubMenu** (const char ∗label, int submenu)
- **GLUTAPI** void **APIENTRY glutChangeToMenuEntry** (int item, const char ∗label, int value)
- **GLUTAPI** void **APIENTRY glutChangeToSubMenu** (int item, const char ∗label, int submenu)
- **GLUTAPI** void **APIENTRY glutRemoveMenuItem** (int item)
- **GLUTAPI** void **APIENTRY glutAttachMenu** (int button)
- **GLUTAPI** void **APIENTRY glutDetachMenu** (int button)
- **GLUTAPI** void **APIENTRY glutDisplayFunc** (void(**GLUTCALLBACK** ∗func)(void))
- **GLUTAPI** void **APIENTRY glutReshapeFunc** (void(**GLUTCALLBACK** ∗func)(int width, int height))

- **GLUTAPI** void **APIENTRY glutKeyboardFunc** (void(**GLUTCALLBACK** ∗func)(unsigned char key, int x, int y))
- **GLUTAPI** void **APIENTRY glutMouseFunc** (void(**GLUTCALLBACK** ∗func)(int button, int state, int x, int y))
- **GLUTAPI** void **APIENTRY glutMotionFunc** (void(**GLUTCALLBACK** ∗func)(int x, int y))
- **GLUTAPI** void **APIENTRY glutPassiveMotionFunc** (void(**GLUTCALLBACK** ∗func)(int x, int y))
- **GLUTAPI** void **APIENTRY glutEntryFunc** (void(**GLUTCALLBACK** ∗func)(int state))
- **GLUTAPI** void **APIENTRY glutVisibilityFunc** (void(**GLUTCALLBACK** ∗func)(int state))
- **GLUTAPI** void **APIENTRY glutIdleFunc** (void(**GLUTCALLBACK** ∗func)(void))
- **GLUTAPI** void **APIENTRY glutTimerFunc** (unsigned int millis, void(**GLUTCALLBACK** ∗func)(int value), int value)
- **GLUTAPI** void **APIENTRY glutMenuStateFunc** (void(**GLUTCALLBACK** ∗func)(int state))
- **GLUTAPI** void **APIENTRY glutSpecialFunc** (void(**GLUTCALLBACK** ∗func)(int key, int x, int y))
- **GLUTAPI** void **APIENTRY glutSpaceballMotionFunc** (void(**GLUTCALLBACK** ∗func)(int x, int y, int z))
- **GLUTAPI** void **APIENTRY glutSpaceballRotateFunc** (void(**GLUTCALLBACK** ∗func)(int x, int y, int z))
- **GLUTAPI** void **APIENTRY glutSpaceballButtonFunc** (void(**GLUTCALLBACK** ∗func)(int button, int state))
- **GLUTAPI** void **APIENTRY glutButtonBoxFunc** (void(**GLUTCALLBACK** ∗func)(int button, int state))
- **GLUTAPI** void **APIENTRY glutDialsFunc** (void(**GLUTCALLBACK** ∗func)(int dial, int value))
- **GLUTAPI** void **APIENTRY glutTabletMotionFunc** (void(**GLUTCALLBACK** ∗func)(int x, int y))
- **GLUTAPI** void **APIENTRY glutTabletButtonFunc** (void(**GLUTCALLBACK** ∗func)(int button, int state, int x, int y))
- **GLUTAPI** void **APIENTRY glutMenuStatusFunc** (void(**GLUTCALLBACK** ∗func)(int status, int x, int y))
- **GLUTAPI** void **APIENTRY glutOverlayDisplayFunc** (void(**GLUTCALLBACK** ∗func)(void))
- **GLUTAPI** void **APIENTRY glutWindowStatusFunc** (void(**GLUTCALLBACK** ∗func)(int state))
- **GLUTAPI** void **APIENTRY glutKeyboardUpFunc** (void(**GLUTCALLBACK** ∗func)(unsigned char key, int x, int y))
- **GLUTAPI** void **APIENTRY glutSpecialUpFunc** (void(**GLUTCALLBACK** ∗func)(int key, int x, int y))
- **GLUTAPI** void **APIENTRY glutJoystickFunc** (void(**GLUTCALLBACK** ∗func)(unsigned int buttonMask, int x, int y, int z), int pollInterval)
- **GLUTAPI** void **APIENTRY glutSetColor** (int, GLfloat red, GLfloat green, GLfloat blue)
- **GLUTAPI** GLfloat **APIENTRY glutGetColor** (int ndx, int component)
- **GLUTAPI** void **APIENTRY glutCopyColormap** (int win)
- **GLUTAPI** int **APIENTRY glutGet** (GLenum type)
- **GLUTAPI** int **APIENTRY glutDeviceGet** (GLenum type)
- **GLUTAPI** int **APIENTRY glutExtensionSupported** (const char ∗name)
- **GLUTAPI** int **APIENTRY glutGetModifiers** (void)
- **GLUTAPI** int **APIENTRY glutLayerGet** (GLenum type)
- **GLUTAPI** void **APIENTRY glutBitmapCharacter** (void ∗font, int character)
- **GLUTAPI** int **APIENTRY glutBitmapWidth** (void ∗font, int character)
- **GLUTAPI** void **APIENTRY glutStrokeCharacter** (void ∗font, int character)
- **GLUTAPI** int **APIENTRY glutStrokeWidth** (void ∗font, int character)
- **GLUTAPI** int **APIENTRY glutBitmapLength** (void ∗font, const unsigned char ∗string)
- **GLUTAPI** int **APIENTRY glutStrokeLength** (void ∗font, const unsigned char ∗string)
- **GLUTAPI** void **APIENTRY glutWireSphere** (GLdouble radius, GLint slices, GLint stacks)
- **GLUTAPI** void **APIENTRY glutSolidSphere** (GLdouble radius, GLint slices, GLint stacks)
- **GLUTAPI** void **APIENTRY glutWireCone** (GLdouble base, GLdouble height, GLint slices, GLint stacks)
- **GLUTAPI** void **APIENTRY glutSolidCone** (GLdouble base, GLdouble height, GLint slices, GLint stacks)
- **GLUTAPI** void **APIENTRY glutWireCube** (GLdouble size)
- **GLUTAPI** void **APIENTRY glutSolidCube** (GLdouble size)
- **GLUTAPI** void **APIENTRY glutWireTorus** (GLdouble innerRadius, GLdouble outerRadius, GLint sides, GLint rings)
- **GLUTAPI** void **APIENTRY glutSolidTorus** (GLdouble innerRadius, GLdouble outerRadius, GLint sides, G↩ Lint rings)
- **GLUTAPI** void **APIENTRY glutWireDodecahedron** (void)
- **GLUTAPI** void **APIENTRY glutSolidDodecahedron** (void)
- **GLUTAPI** void **APIENTRY glutWireTeapot** (GLdouble size)

- **GLUTAPI** void **APIENTRY glutSolidTeapot** (GLdouble size)
- **GLUTAPI** void **APIENTRY glutWireOctahedron** (void)
- **GLUTAPI** void **APIENTRY glutSolidOctahedron** (void)
- **GLUTAPI** void **APIENTRY glutWireTetrahedron** (void)
- **GLUTAPI** void **APIENTRY glutSolidTetrahedron** (void)
- **GLUTAPI** void **APIENTRY glutWireIcosahedron** (void)
- **GLUTAPI** void **APIENTRY glutSolidIcosahedron** (void)
- **GLUTAPI** int **APIENTRY glutVideoResizeGet** (GLenum param)
- **GLUTAPI** void **APIENTRY glutSetupVideoResizing** (void)
- **GLUTAPI** void **APIENTRY glutStopVideoResizing** (void)
- **GLUTAPI** void **APIENTRY glutVideoResize** (int x, int y, int width, int height)
- **GLUTAPI** void **APIENTRY glutVideoPan** (int x, int y, int width, int height)
- **GLUTAPI** void **APIENTRY glutReportErrors** (void)
- **GLUTAPI** void **APIENTRY glutIgnoreKeyRepeat** (int ignore)
- **GLUTAPI** void **APIENTRY glutSetKeyRepeat** (int repeatMode)
- **GLUTAPI** void **APIENTRY glutForceJoystickFunc** (void)
- **GLUTAPI** void **APIENTRY glutGameModeString** (const char ∗string)
- **GLUTAPI** int **APIENTRY glutEnterGameMode** (void)
- **GLUTAPI** void **APIENTRY glutLeaveGameMode** (void)
- **GLUTAPI** int **APIENTRY glutGameModeGet** (GLenum mode)

Variables

- **GLUTAPI** void ∗ **glutStrokeRoman**
- **GLUTAPI** void ∗ **glutStrokeMonoRoman**
- **GLUTAPI** void ∗ **glutBitmap9By15**
- **GLUTAPI** void ∗ **glutBitmap8By13**
- **GLUTAPI** void ∗ **glutBitmapTimesRoman10**
- **GLUTAPI** void ∗ **glutBitmapTimesRoman24**
- **GLUTAPI** void ∗ **glutBitmapHelvetica10**
- **GLUTAPI** void ∗ **glutBitmapHelvetica12**
- **GLUTAPI** void ∗ **glutBitmapHelvetica18**

5.9.1 Macro Definition Documentation

5.9.1.1 #define APIENTRY

5.9.1.2 #define CALLBACK

5.9.1.3 #define GLUT_ACCUM 4

5.9.1.4 #define GLUT_ACTIVE_ALT 4

5.9.1.5 #define GLUT_ACTIVE_CTRL 2

5.9.1.6 #define GLUT_ACTIVE_SHIFT 1

5.9.1.7 #define GLUT_ALPHA 8

5.9.1.8 #define GLUT_API_VERSION 3

GLUT API revision history:

GLUT_API_VERSION is updated to reflect incompatible GLUT API changes (interface changes, semantic changes, deletions, or additions).

GLUT_API_VERSION=1 First public release of GLUT. 11/29/94

GLUT_API_VERSION=2 Added support for OpenGL/GLX multisampling, extension. Supports new input devices like tablet, dial and button box, and Spaceball. Easy to query OpenGL extensions.

GLUT_API_VERSION=3 glutMenuStatus added.

GLUT_API_VERSION=4 glutInitDisplayString, glutWarpPointer, glutBitmapLength, glutStrokeLength, glut↩ WindowStatusFunc, dynamic video resize subAPI, glutPostWindowRedisplay, glutKeyboardUpFunc, glutSpecial↩ UpFunc, glutIgnoreKeyRepeat, glutSetKeyRepeat, glutJoystickFunc, glutForceJoystickFunc (NOT FINALIZED!).

5.9.1.9 #define GLUT_APIENTRY_DEFINED

5.9.1.10 #define GLUT_BITMAP_8_BY_13 (&glutBitmap8By13)

5.9.1.11 #define GLUT_BITMAP_9_BY_15 (&glutBitmap9By15)

5.9.1.12 #define GLUT_BITMAP_HELVETICA_10 (&glutBitmapHelvetica10)

5.9.1.13 #define GLUT_BITMAP_HELVETICA_12 (&glutBitmapHelvetica12)

5.9.1.14 #define GLUT_BITMAP_HELVETICA_18 (&glutBitmapHelvetica18)

5.9.1.15 #define GLUT_BITMAP_TIMES_ROMAN_10 (&glutBitmapTimesRoman10)

5.9.1.16 #define GLUT_BITMAP_TIMES_ROMAN_24 (&glutBitmapTimesRoman24)

5.9.1.17 #define GLUT_BLUE 2

5.9.1.18 #define GLUT_CURSOR_BOTTOM_LEFT_CORNER 19

5.9.1.19 #define GLUT_CURSOR_BOTTOM_RIGHT_CORNER 18

5.9.1.20 #define GLUT_CURSOR_BOTTOM_SIDE 13

5.9.1.21 #define GLUT_CURSOR_CROSSHAIR 9

5.9.1.22 #define GLUT_CURSOR_CYCLE 5

5.9.1.23 #define GLUT_CURSOR_DESTROY 3

5.9.1.24 #define GLUT_CURSOR_FULL_CROSSHAIR 102

5.9.1.25 #define GLUT_CURSOR_HELP 4

5.9.1.26 #define GLUT_CURSOR_INFO 2

5.9.1.27 #define GLUT_CURSOR_INHERIT 100

5.9.1.28 #define GLUT_CURSOR_LEFT_ARROW 1

5.9.1.29 #define GLUT_CURSOR_LEFT_RIGHT 11

5.9.1.30 #define GLUT_CURSOR_LEFT_SIDE 14

5.9.1.31 #define GLUT_CURSOR_NONE 101

5.9.1.32 #define GLUT_CURSOR_RIGHT_ARROW 0

5.9.1.33 #define GLUT_CURSOR_RIGHT_SIDE 15

5.9.1.34 #define GLUT_CURSOR_SPRAY 6

5.9.1.35 #define GLUT_CURSOR_TEXT 8

5.9.1.36 #define GLUT_CURSOR_TOP_LEFT_CORNER 16

5.9.1.37 #define GLUT_CURSOR_TOP_RIGHT_CORNER 17

5.9.1.38 #define GLUT_CURSOR_TOP_SIDE 12

5.9.1.39 #define GLUT_CURSOR_UP_DOWN 10

5.9.1.40 #define GLUT_CURSOR_WAIT 7

5.9.1.41 #define GLUT_DEPTH 16

5.9.1.42 #define GLUT_DEVICE_IGNORE_KEY_REPEAT ((GLenum) 610)

5.9.1.43 #define GLUT_DEVICE_KEY_REPEAT ((GLenum) 611)

5.9.1.44 #define GLUT_DISPLAY_MODE_POSSIBLE ((GLenum) 400)

5.9.1.45 #define GLUT_DOUBLE 2

5.9.1.46 #define GLUT_DOWN 0

5.9.1.47 #define GLUT_ELAPSED_TIME ((GLenum) 700)

5.9.1.48 #define GLUT_ENTERED 1

5.9.1.49 #define GLUT_FULLY_COVERED 3

5.9.1.50 #define GLUT_FULLY_RETAINED 1

5.9.1.51 #define GLUT_GAME_MODE_ACTIVE ((GLenum) 0)

5.9.1.52 #define GLUT_GAME_MODE_DISPLAY_CHANGED ((GLenum) 6)

5.9.1.53 #define GLUT_GAME_MODE_HEIGHT ((GLenum) 3)

5.9.1.54 #define GLUT_GAME_MODE_PIXEL_DEPTH ((GLenum) 4)

5.9.1.55 #define GLUT_GAME_MODE_POSSIBLE ((GLenum) 1)

5.9.1.56 #define GLUT_GAME_MODE_REFRESH_RATE ((GLenum) 5)

5.9.1.57 #define GLUT_GAME_MODE_WIDTH ((GLenum) 2)

5.9.1.58 #define GLUT_GREEN 1

5.9.1.59 #define GLUT_HAS_DIAL_AND_BUTTON_BOX ((GLenum) 603)

5.9.1.60 #define GLUT_HAS_JOYSTICK ((GLenum) 612)

5.9.1.61 #define GLUT_HAS_KEYBOARD ((GLenum) 600)

5.9.1.62 #define GLUT_HAS_MOUSE ((GLenum) 601)

5.9.1.63 #define GLUT_HAS_OVERLAY ((GLenum) 802)

5.9.1.64 #define GLUT_HAS_SPACEBALL ((GLenum) 602)

5.9.1.65 #define GLUT_HAS_TABLET ((GLenum) 604)

5.9.1.66 #define GLUT_HIDDEN 0

5.9.1.67 #define GLUT_INDEX 1

5.9.1.68 #define GLUT_INIT_DISPLAY_MODE ((GLenum) 504)

5.9.1.69 #define GLUT_INIT_WINDOW_HEIGHT ((GLenum) 503)

5.9.1.70 #define GLUT_INIT_WINDOW_WIDTH ((GLenum) 502)

5.9.1.71 #define GLUT_INIT_WINDOW_X ((GLenum) 500)

5.9.1.72 #define GLUT_INIT_WINDOW_Y ((GLenum) 501)

5.9.1.73 #define GLUT_JOYSTICK_AXES ((GLenum) 615)

5.9.1.74 #define GLUT_JOYSTICK_BUTTON_A 1

5.9.1.75 #define GLUT_JOYSTICK_BUTTON_B 2

5.9.1.76 #define GLUT_JOYSTICK_BUTTON_C 4

5.9.1.77 #define GLUT_JOYSTICK_BUTTON_D 8

5.9.1.78 #define GLUT_JOYSTICK_BUTTONS ((GLenum) 614)

5.9.1.79 #define GLUT_JOYSTICK_POLL_RATE ((GLenum) 616)

5.9.1.80 #define GLUT_KEY_DOWN 103

5.9.1.81 #define GLUT_KEY_END 107

5.9.1.82 #define GLUT_KEY_F1 1

5.9.1.83 #define GLUT_KEY_F10 10

5.9.1.84 #define GLUT_KEY_F11 11

5.9.1.85 #define GLUT_KEY_F12 12

5.9.1.86 #define GLUT_KEY_F2 2

5.9.1.87 #define GLUT_KEY_F3 3

5.9.1.88 #define GLUT_KEY_F4 4

5.9.1.89 #define GLUT_KEY_F5 5

5.9.1.90 #define GLUT_KEY_F6 6

5.9.1.91 #define GLUT_KEY_F7 7

5.9.1.92 #define GLUT_KEY_F8 8

5.9.1.93 #define GLUT_KEY_F9 9

5.9.1.94 #define GLUT_KEY_HOME 106

5.9.1.95 #define GLUT_KEY_INSERT 108

5.9.1.96 #define GLUT_KEY_LEFT 100

5.9.1.97 #define GLUT_KEY_PAGE_DOWN 105

5.9.1.98 #define GLUT_KEY_PAGE_UP 104

5.9.1.99 #define GLUT_KEY_REPEAT_DEFAULT 2

5.9.1.100 #define GLUT_KEY_REPEAT_OFF 0

5.9.1.101 #define GLUT_KEY_REPEAT_ON 1

5.9.1.102 #define GLUT_KEY_RIGHT 102

5.9.1.103 #define GLUT_KEY_UP 101

5.9.1.104 #define GLUT_LAYER_IN_USE ((GLenum) 801)

5.9.1.105 #define GLUT_LEFT 0

5.9.1.106 #define GLUT_LEFT_BUTTON 0

5.9.1.107 #define GLUT_LUMINANCE 512

5.9.1.108 #define GLUT_MENU_IN_USE 1

5.9.1.109 #define GLUT_MENU_NOT_IN_USE 0

5.9.1.110 #define GLUT_MENU_NUM_ITEMS ((GLenum) 300)

5.9.1.111 #define GLUT_MIDDLE_BUTTON 1

5.9.1.112 #define GLUT_MULTISAMPLE 128

5.9.1.113 #define GLUT_NORMAL ((GLenum) 0)

5.9.1.114 #define GLUT_NORMAL_DAMAGED ((GLenum) 804)

5.9.1.115 #define GLUT_NOT_VISIBLE 0

5.9.1.116 #define GLUT_NUM_BUTTON_BOX_BUTTONS ((GLenum) 607)

5.9.1.117 #define GLUT_NUM_DIALS ((GLenum) 608)

5.9.1.118 #define GLUT_NUM_MOUSE_BUTTONS ((GLenum) 605)

5.9.1.119 #define GLUT_NUM_SPACEBALL_BUTTONS ((GLenum) 606)

5.9.1.120 #define GLUT_NUM_TABLET_BUTTONS ((GLenum) 609)

5.9.1.121 #define GLUT_OVERLAY ((GLenum) 1)

5.9.1.122 #define GLUT_OVERLAY_DAMAGED ((GLenum) 805)

5.9.1.123 #define GLUT_OVERLAY_POSSIBLE ((GLenum) 800)

5.9.1.124 #define GLUT_OWNS_JOYSTICK ((GLenum) 613)

5.9.1.125 #define GLUT_PARTIALLY_RETAINED 2

5.9.1.126 #define GLUT_RED 0

5.9.1.127 #define GLUT_RGB 0

5.9.1.128 #define GLUT_RGBA GLUT_RGB

5.9.1.129 #define GLUT_RIGHT_BUTTON 2

5.9.1.130 #define GLUT_SCREEN_HEIGHT ((GLenum) 201)

5.9.1.131 #define GLUT_SCREEN_HEIGHT_MM ((GLenum) 203)

5.9.1.132 #define GLUT_SCREEN_WIDTH ((GLenum) 200)

5.9.1.133 #define GLUT_SCREEN_WIDTH_MM ((GLenum) 202)

5.9.1.134 #define GLUT_SINGLE 0

5.9.1.135 #define GLUT_STENCIL 32

5.9.1.136 #define GLUT_STEREO 256

5.9.1.137 #define GLUT_STROKE_MONO_ROMAN (&glutStrokeMonoRoman)

5.9.1.138 #define GLUT_STROKE_ROMAN (&glutStrokeRoman)

5.9.1.139 #define GLUT_TRANSPARENT_INDEX ((GLenum) 803)

5.9.1.140 #define GLUT_UP 1

5.9.1.141 #define GLUT_VIDEO_RESIZE_HEIGHT ((GLenum) 909)

5.9.1.142 #define GLUT_VIDEO_RESIZE_HEIGHT_DELTA ((GLenum) 905)

5.9.1.143 #define GLUT_VIDEO_RESIZE_IN_USE ((GLenum) 901)

5.9.1.144 #define GLUT_VIDEO_RESIZE_POSSIBLE ((GLenum) 900)

5.9.1.145 #define GLUT_VIDEO_RESIZE_WIDTH ((GLenum) 908)

5.9.1.146 #define GLUT_VIDEO_RESIZE_WIDTH_DELTA ((GLenum) 904)

5.9.1.147 #define GLUT_VIDEO_RESIZE_X ((GLenum) 906)

5.9.1.148 #define GLUT_VIDEO_RESIZE_X_DELTA ((GLenum) 902)

5.9.1.149 #define GLUT_VIDEO_RESIZE_Y ((GLenum) 907)

5.9.1.150 #define GLUT_VIDEO_RESIZE_Y_DELTA ((GLenum) 903)

5.9.1.151 #define GLUT_VISIBLE 1

5.9.1.152 #define GLUT_WHEEL_DOWN 4

5.9.1.153 #define GLUT_WHEEL_UP 3

5.9.1.154 #define GLUT_WINDOW_ACCUM_ALPHA_SIZE ((GLenum) 114)

5.9.1.155 #define GLUT_WINDOW_ACCUM_BLUE_SIZE ((GLenum) 113)

5.9.1.156 #define GLUT_WINDOW_ACCUM_GREEN_SIZE ((GLenum) 112)

5.9.1.157 #define GLUT_WINDOW_ACCUM_RED_SIZE ((GLenum) 111)

5.9.1.158 #define GLUT_WINDOW_ALPHA_SIZE ((GLenum) 110)

5.9.1.159 #define GLUT_WINDOW_BLUE_SIZE ((GLenum) 109)

5.9.1.160 #define GLUT_WINDOW_BUFFER_SIZE ((GLenum) 104)

5.9.1.161 #define GLUT_WINDOW_COLORMAP_SIZE ((GLenum) 119)

5.9.1.162 #define GLUT_WINDOW_CURSOR ((GLenum) 122)

5.9.1.163 #define GLUT_WINDOW_DEPTH_SIZE ((GLenum) 106)

5.9.1.164 #define GLUT_WINDOW_DOUBLEBUFFER ((GLenum) 115)

5.9.1.165 #define GLUT_WINDOW_FORMAT_ID ((GLenum) 123)

5.9.1.166 #define GLUT_WINDOW_GREEN_SIZE ((GLenum) 108)

5.9.1.167 #define GLUT_WINDOW_HEIGHT ((GLenum) 103)

5.9.1.168 #define GLUT_WINDOW_NUM_CHILDREN ((GLenum) 118)

5.9.1.169 #define GLUT_WINDOW_NUM_SAMPLES ((GLenum) 120)

5.9.1.170 #define GLUT_WINDOW_PARENT ((GLenum) 117)

5.9.1.171 #define GLUT_WINDOW_RED_SIZE ((GLenum) 107)

5.9.1.172 #define GLUT_WINDOW_RGBA ((GLenum) 116)

5.9.1.173 #define GLUT_WINDOW_STENCIL_SIZE ((GLenum) 105)

5.9.1.174 #define GLUT_WINDOW_STEREO ((GLenum) 121)

5.9.1.175 #define GLUT_WINDOW_WIDTH ((GLenum) 102)

5.9.1.176 #define GLUT_WINDOW_X ((GLenum) 100)

5.9.1.177 #define GLUT_WINDOW_Y ((GLenum) 101)

5.9.1.178 #define GLUT_XBUTTON1 5

5.9.1.179 #define GLUT_XBUTTON2 6

5.9.1.180 #define GLUT_XLIB_IMPLEMENTATION 15

GLUT implementation revision history:

GLUT_XLIB_IMPLEMENTATION is updated to reflect both GLUT API revisions and implementation revisions (ie, bug fixes).

GLUT_XLIB_IMPLEMENTATION=1 mjk's first public release of GLUT Xlib-based implementation. 11/29/94

GLUT_XLIB_IMPLEMENTATION=2 mjk's second public release of GLUT Xlib-based implementation providing G↩ LUT version 2 interfaces.

GLUT_XLIB_IMPLEMENTATION=3 mjk's GLUT 2.2 images. 4/17/95

GLUT_XLIB_IMPLEMENTATION=4 mjk's GLUT 2.3 images. 6/?/95

GLUT_XLIB_IMPLEMENTATION=5 mjk's GLUT 3.0 images. 10/?/95

GLUT_XLIB_IMPLEMENTATION=7 mjk's GLUT 3.1+ with glutWarpPoitner. 7/24/96

GLUT_XLIB_IMPLEMENTATION=8 mjk's GLUT 3.1+ with glutWarpPoitner and video resize. 1/3/97

GLUT_XLIB_IMPLEMENTATION=9 mjk's GLUT 3.4 release with early GLUT 4 routines.

GLUT_XLIB_IMPLEMENTATION=11 Mesa 2.5's GLUT 3.6 release.

GLUT_XLIB_IMPLEMENTATION=12 mjk's GLUT 3.6 release with early GLUT 4 routines + signal handling.

GLUT_XLIB_IMPLEMENTATION=13 mjk's GLUT 3.7 beta with GameGLUT support.

GLUT_XLIB_IMPLEMENTATION=14 mjk's GLUT 3.7 beta with f90gl friend interface.

GLUT_XLIB_IMPLEMENTATION=15 mjk's GLUT 3.7 beta sync'ed with Mesa <GL/glut.h>

5.9.1.181 #define GLUTAPI extern

5.9.1.182 #define GLUTCALLBACK

5.9.2 Function Documentation

5.9.2.1 void exit (int)

5.9.2.2 GLUTAPI void APIENTRY glutAddMenuEntry (const char * *label,* int *value*)

5.9.2.3 GLUTAPI void APIENTRY glutAddSubMenu (const char * *label,* int *submenu*)

5.9.2.4 GLUTAPI void APIENTRY glutAttachMenu (int *button*)

5.9.2.5 GLUTAPI void APIENTRY glutBitmapCharacter (void * *font,* int *character*)

5.9.2.6 GLUTAPI int APIENTRY glutBitmapLength (void * *font,* const unsigned char * *string*)

5.9.2.7 GLUTAPI int APIENTRY glutBitmapWidth (void * *font,* int *character*)

5.9.2.8 GLUTAPI void APIENTRY glutButtonBoxFunc (void(GLUTCALLBACK *func)(int button, int state))

5.9.2.9 GLUTAPI void APIENTRY glutChangeToMenuEntry (int *item,* const char * *label,* int *value*)

5.9.2.10 GLUTAPI void APIENTRY glutChangeToSubMenu (int *item,* const char * *label,* int *submenu*)

5.9.2.11 GLUTAPI void APIENTRY glutCopyColormap (int *win*)

5.9.2.12 GLUTAPI int APIENTRY glutCreateMenu (void(GLUTCALLBACK *func)(int))

5.9.2.13 GLUTAPI int APIENTRY glutCreateSubWindow (int *win,* int *x,* int *y,* int *width,* int *height*)

5.9.2.14 GLUTAPI int APIENTRY glutCreateWindow (const char * *title*)

Here is the caller graph for this function:

5.9.2.15 **GLUTAPI** void **APIENTRY** glutDestroyMenu (int *menu*)

5.9.2.16 **GLUTAPI** void **APIENTRY** glutDestroyWindow (int *win*)

5.9.2.17 **GLUTAPI** void **APIENTRY** glutDetachMenu (int *button*)

5.9.2.18 **GLUTAPI** int **APIENTRY** glutDeviceGet (GLenum *type*)

5.9.2.19 **GLUTAPI** void **APIENTRY** glutDialsFunc (void(**GLUTCALLBACK** ∗func)(int dial, int value))

5.9.2.20 **GLUTAPI** void **APIENTRY** glutDisplayFunc (void(**GLUTCALLBACK** ∗func)(void))

Here is the caller graph for this function:

5.9.2.21 **GLUTAPI** int **APIENTRY** glutEnterGameMode (void)

5.9.2.22 **GLUTAPI** void **APIENTRY** glutEntryFunc (void(**GLUTCALLBACK** ∗func)(int state))

5.9.2.23 **GLUTAPI** void **APIENTRY** glutEstablishOverlay (void)

5.9.2.24 **GLUTAPI** int **APIENTRY** glutExtensionSupported (const char ∗ *name*)

5.9.2.25 **GLUTAPI** void **APIENTRY** glutForceJoystickFunc (void)

5.9.2.26 **GLUTAPI** void **APIENTRY** glutFullScreen (void)

5.9.2.27 **GLUTAPI** int **APIENTRY** glutGameModeGet (GLenum *mode*)

5.9.2.28 **GLUTAPI** void **APIENTRY** glutGameModeString (const char ∗ *string*)

5.9.2.29 **GLUTAPI** int **APIENTRY** glutGet (GLenum *type*)

5.9.2.30 **GLUTAPI** GLfloat **APIENTRY** glutGetColor (int *ndx,* int *component*)

5.9.2.31 **GLUTAPI** int **APIENTRY** glutGetMenu (void)

5.9.2.32 **GLUTAPI** int **APIENTRY** glutGetModifiers (void)

5.9.2.33 **GLUTAPI** int **APIENTRY** glutGetWindow (void)

5.9.2.34 **GLUTAPI** void **APIENTRY** glutHideOverlay (void)

5.9.2.35 **GLUTAPI** void **APIENTRY** glutHideWindow (void)

5.9.2.36 **GLUTAPI** void **APIENTRY** glutIconifyWindow (void)

5.9.2.37 **GLUTAPI** void **APIENTRY** glutIdleFunc (void(**GLUTCALLBACK** ∗func)(void))

5.9.2.38 **GLUTAPI** void **APIENTRY** glutIgnoreKeyRepeat (int *ignore*)

5.9.2.39 **GLUTAPI** void **APIENTRY** glutInit (int ∗ *argcp,* char ∗∗ *argv*)

Here is the caller graph for this function:

5.9.2.40 **GLUTAPI void APIENTRY glutInitDisplayMode (unsigned int *mode*)**

Here is the caller graph for this function:

5.9.2.41 **GLUTAPI void APIENTRY glutInitDisplayString (const char * *string*)**

5.9.2.42 **GLUTAPI void APIENTRY glutInitWindowPosition (int *x,* int *y*)**

Here is the caller graph for this function:

5.9.2.43 **GLUTAPI void APIENTRY glutInitWindowSize (int *width,* int *height*)**

Here is the caller graph for this function:

5.9.2.44 **GLUTAPI void APIENTRY glutJoystickFunc (void(GLUTCALLBACK *func)(unsigned int buttonMask, int x, int y, int z) , int *pollInterval*)**

5.9.2.45 **GLUTAPI void APIENTRY glutKeyboardFunc (void(GLUTCALLBACK *func)(unsigned char key, int x, int y))**

Here is the caller graph for this function:

5.9.2.46 **GLUTAPI void APIENTRY glutKeyboardUpFunc (void(GLUTCALLBACK *func)(unsigned char key, int x, int y))**

5.9.2.47 **GLUTAPI int APIENTRY glutLayerGet (GLenum *type*)**

5.9.2.48 **GLUTAPI void APIENTRY glutLeaveGameMode (void)**

5.9.2.49 **GLUTAPI void APIENTRY glutMainLoop (void)**

Here is the caller graph for this function:

5.9.2.50 **GLUTAPI void APIENTRY glutMenuStateFunc (void(GLUTCALLBACK *func)(int state))**

5.9.2.51 **GLUTAPI void APIENTRY glutMenuStatusFunc (void(GLUTCALLBACK *func)(int status, int x, int y))**

5.9.2.52 **GLUTAPI void APIENTRY glutMotionFunc (void(GLUTCALLBACK *func)(int x, int y))**

5.9.2.53 **GLUTAPI void APIENTRY glutMouseFunc (void(GLUTCALLBACK *func)(int button, int state, int x, int y))**

5.9.2.54 **GLUTAPI void APIENTRY glutOverlayDisplayFunc (void(GLUTCALLBACK *func)(void))**

5.9.2.55 **GLUTAPI void APIENTRY glutPassiveMotionFunc (void(GLUTCALLBACK *func)(int x, int y))**

5.9.2.56 **GLUTAPI void APIENTRY glutPopWindow (void)**

5.9.2.57 **GLUTAPI void APIENTRY glutPositionWindow (int *x,* int *y*)**

5.9.2.58 **GLUTAPI void APIENTRY glutPostOverlayRedisplay (void)**

5.9.2.59 **GLUTAPI void APIENTRY glutPostRedisplay (void)**

Here is the caller graph for this function:

5.9.2.60 **GLUTAPI void APIENTRY glutPostWindowOverlayRedisplay (int *win*)**

5.9.2.61 **GLUTAPI void APIENTRY glutPostWindowRedisplay (int *win*)**

5.9.2.62 **GLUTAPI void APIENTRY glutPushWindow (void)**

5.9.2.63 **GLUTAPI void APIENTRY glutRemoveMenuItem (int *item*)**

5.9.2.64 **GLUTAPI void APIENTRY glutRemoveOverlay (void)**

5.9.2.65 **GLUTAPI void APIENTRY glutReportErrors (void)**

5.9.2.66 **GLUTAPI void APIENTRY glutReshapeFunc (void(GLUTCALLBACK *func)(int width, int height))**

Here is the caller graph for this function:

5.9.2.67 **GLUTAPI void APIENTRY glutReshapeWindow (int *width,* int *height*)**

5.9.2.68 **GLUTAPI void APIENTRY glutSetColor (int , GLfloat *red,* GLfloat *green,* GLfloat *blue*)**

5.9.2.69 **GLUTAPI void APIENTRY glutSetCursor (int *cursor*)**

5.9.2.70 **GLUTAPI void APIENTRY glutSetIconTitle (const char * *title*)**

5.9.2.71 **GLUTAPI void APIENTRY glutSetKeyRepeat (int *repeatMode*)**

5.9.2.72 **GLUTAPI void APIENTRY glutSetMenu (int *menu*)**

5.9.2.73 **GLUTAPI void APIENTRY glutSetupVideoResizing (void)**

5.9.2.74 **GLUTAPI void APIENTRY glutSetWindow (int *win*)**

5.9.2.75 **GLUTAPI void APIENTRY glutSetWindowTitle (const char * *title*)**

5.9.2.76 **GLUTAPI void APIENTRY glutShowOverlay (void)**

5.9.2.77 **GLUTAPI void APIENTRY glutShowWindow (void)**

5.9.2.78 **GLUTAPI void APIENTRY glutSolidCone (GLdouble *base,* GLdouble *height,* GLint *slices,* GLint *stacks*)**

5.9.2.79 **GLUTAPI void APIENTRY glutSolidCube (GLdouble *size*)**

5.9.2.80 **GLUTAPI void APIENTRY glutSolidDodecahedron (void)**

5.9.2.81 **GLUTAPI void APIENTRY glutSolidIcosahedron (void)**

5.9.2.82 **GLUTAPI** void **APIENTRY** glutSolidOctahedron (void)

5.9.2.83 **GLUTAPI** void **APIENTRY** glutSolidSphere (GLdouble *radius,* GLint *slices,* GLint *stacks*)

5.9.2.84 **GLUTAPI** void **APIENTRY** glutSolidTeapot (GLdouble *size*)

5.9.2.85 **GLUTAPI** void **APIENTRY** glutSolidTetrahedron (void)

5.9.2.86 **GLUTAPI** void **APIENTRY** glutSolidTorus (GLdouble *innerRadius,* GLdouble *outerRadius,* GLint *sides,* GLint *rings*)

5.9.2.87 **GLUTAPI** void **APIENTRY** glutSpaceballButtonFunc (void(**GLUTCALLBACK** ∗func)(int button, int state))

5.9.2.88 **GLUTAPI** void **APIENTRY** glutSpaceballMotionFunc (void(**GLUTCALLBACK** ∗func)(int x, int y, int z))

5.9.2.89 **GLUTAPI** void **APIENTRY** glutSpaceballRotateFunc (void(**GLUTCALLBACK** ∗func)(int x, int y, int z))

5.9.2.90 **GLUTAPI** void **APIENTRY** glutSpecialFunc (void(**GLUTCALLBACK** ∗func)(int key, int x, int y))

5.9.2.91 **GLUTAPI** void **APIENTRY** glutSpecialUpFunc (void(**GLUTCALLBACK** ∗func)(int key, int x, int y))

5.9.2.92 **GLUTAPI** void **APIENTRY** glutStopVideoResizing (void)

5.9.2.93 **GLUTAPI** void **APIENTRY** glutStrokeCharacter (void ∗ *font,* int *character*)

5.9.2.94 **GLUTAPI** int **APIENTRY** glutStrokeLength (void ∗ *font,* const unsigned char ∗ *string*)

5.9.2.95 **GLUTAPI** int **APIENTRY** glutStrokeWidth (void ∗ *font,* int *character*)

5.9.2.96 **GLUTAPI** void **APIENTRY** glutSwapBuffers (void)

Here is the caller graph for this function:

5.9.2.97 **GLUTAPI** void **APIENTRY** glutTabletButtonFunc (void(**GLUTCALLBACK** ∗func)(int button, int state, int x, int y))

5.9.2.98 **GLUTAPI** void **APIENTRY** glutTabletMotionFunc (void(**GLUTCALLBACK** ∗func)(int x, int y))

5.9.2.99 **GLUTAPI** void **APIENTRY** glutTimerFunc (unsigned int *millis,* void(**GLUTCALLBACK** ∗func)(int value) , int *value*)

Here is the caller graph for this function:

5.9.2.100 **GLUTAPI** void **APIENTRY** glutUseLayer (GLenum *layer*)

5.9.2.101 **GLUTAPI** void **APIENTRY** glutVideoPan (int *x,* int *y,* int *width,* int *height*)

5.9.2.102 **GLUTAPI** void **APIENTRY** glutVideoResize (int *x,* int *y,* int *width,* int *height*)

5.9.2.103 **GLUTAPI** int **APIENTRY** glutVideoResizeGet (GLenum *param*)

5.9.2.104 **GLUTAPI** void **APIENTRY** glutVisibilityFunc (void(**GLUTCALLBACK** *func)(int state))

5.9.2.105 **GLUTAPI** void **APIENTRY** glutWarpPointer (int *x,* int *y*)

5.9.2.106 **GLUTAPI** void **APIENTRY** glutWindowStatusFunc (void(**GLUTCALLBACK** *func)(int state))

5.9.2.107 **GLUTAPI** void **APIENTRY** glutWireCone (GLdouble *base,* GLdouble *height,* GLint *slices,* GLint *stacks*)

5.9.2.108 **GLUTAPI** void **APIENTRY** glutWireCube (GLdouble *size*)

5.9.2.109 **GLUTAPI** void **APIENTRY** glutWireDodecahedron (void)

5.9.2.110 **GLUTAPI** void **APIENTRY** glutWireIcosahedron (void)

5.9.2.111 **GLUTAPI** void **APIENTRY** glutWireOctahedron (void)

5.9.2.112 **GLUTAPI** void **APIENTRY** glutWireSphere (GLdouble *radius,* GLint *slices,* GLint *stacks*)

5.9.2.113 **GLUTAPI** void **APIENTRY** glutWireTeapot (GLdouble *size*)

5.9.2.114 **GLUTAPI** void **APIENTRY** glutWireTetrahedron (void)

5.9.2.115 **GLUTAPI** void **APIENTRY** glutWireTorus (GLdouble *innerRadius,* GLdouble *outerRadius,* GLint *sides,* GLint *rings*)

5.9.3 Variable Documentation

5.9.3.1 **GLUTAPI** void* glutBitmap8By13

5.9.3.2 **GLUTAPI** void* glutBitmap9By15

5.9.3.3 **GLUTAPI** void* glutBitmapHelvetica10

5.9.3.4 **GLUTAPI** void* glutBitmapHelvetica12

5.9.3.5 **GLUTAPI** void* glutBitmapHelvetica18

5.9.3.6 GLUTAPI void* glutBitmapTimesRoman10

5.9.3.7 GLUTAPI void* glutBitmapTimesRoman24

5.9.3.8 GLUTAPI void* glutStrokeMonoRoman

5.9.3.9 GLUTAPI void* glutStrokeRoman

5.10 OpenGLSkeleton/main.cpp File Reference

```
#include <iostream>
#include <string>
#include "glut.h"
#include <list>
#include <math.h>
#include <vector>
#include "main.h"
#include "drawtools.h"
#include "Enemy.h"
#include "Turret.h"
#include "FiredBullet.h"
#include <fstream>
```

Include dependency graph for main.cpp:

Macros

- #define **_USE_MATH_DEFINES**

Functions

- void **init** ()
- void **readFile** (string **filename**)
- void **raster** ()
- void **path** ()
- void **makeEnemy** ()
- void **drawEnemy** ()
- void **drawBullets** (**PointF** posEnemy, int j)
- void **makeTurret** (float x, float y)
- void **drawTurret** ()
- void **drawBullet** ()
- void **idle** (int value)
- void **reshape** (int w, int h)
- void **display** ()
- void **keyfunc** (unsigned char key, int x, int y)
- int **main** (int argc, char *argv[])

Variables

- std::string **keytext**
- **DrawList drawList**
- string **filename** = "test"
- int **PlayerHealth** = 100
- int **PlayerScore** = 0
- string **MapName**
- const int **mapSizex** = 100
- const int **mapSizey** = 100
- char **Map** [**mapSizex**][**mapSizey**]
- vector< **Enemy** * > **enenemyvector**
- vector< **Turret** * > **turretvector**
- vector< **FiredBullet** * > **bulletvector**
- int **start** = 0

5.10.1 Macro Definition Documentation

5.10.1.1 #define _USE_MATH_DEFINES

5.10.2 Function Documentation

5.10.2.1 void display ( )

Here is the call graph for this function:

Here is the caller graph for this function:

5.10.2.2 void drawBullet ( )

Here is the caller graph for this function:

5.10.2.3 void drawBullets (PointF *posEnemy,* int *j*)

Here is the caller graph for this function:

5.10.2.4 void drawEnemy ( )

Here is the call graph for this function:

Here is the caller graph for this function:

5.10.2.5 void drawTurret ( )

Here is the caller graph for this function:

5.10.2.6 void idle (int *value*)

Here is the call graph for this function:

Here is the caller graph for this function:

5.10.2.7 void init ( )

Here is the call graph for this function:

Here is the caller graph for this function:

5.10.2.8 void keyfunc (unsigned char *key,* int *x,* int *y*)

Here is the call graph for this function:

Here is the caller graph for this function:

5.10.2.9 int main (int *argc,* char * *argv[ ]*)

Here is the call graph for this function:

5.10.2.10 void makeEnemy ( )

Here is the caller graph for this function:

5.10.2.11 void makeTurret (float *x,* float *y*)

Here is the caller graph for this function:

5.10.2.12 void path ( )

Here is the caller graph for this function:

5.10.2.13 void raster ( )

Here is the call graph for this function:

Here is the caller graph for this function:

5.10.2.14 void readFile (string *filename*)

Here is the caller graph for this function:

5.10.2.15 void reshape (int *w,* int *h*)

Here is the call graph for this function:

Here is the caller graph for this function:

5.10.3 Variable Documentation

5.10.3.1 vector<FiredBullet*> bulletvector

5.10.3.2 DrawList drawList

5.10.3.3 vector<Enemy*> enenemyvector

5.10.3.4 string filename = "test"

5.10.3.5 std::string keytext

5.10.3.6 char Map[mapSizex][mapSizey]

5.10.3.7 string MapName

5.10.3.8 const int mapSizex = 100

5.10.3.9 const int mapSizey = 100

5.10.3.10 int PlayerHealth = 100

5.10.3.11 int PlayerScore = 0

5.10.3.12 int start = 0

5.10.3.13 vector<Turret*> turretvector

5.11 OpenGLSkeleton/main.h File Reference

```
#include "glut.h"
#include "drawtools.h"
```

Include dependency graph for main.h: This graph shows which files directly or indirectly include this file:

Functions

- int **main** (int argc, char ∗argv[ ])
- void **init** ()
- void **reshape** (int w, int h)
- void **display** ()
- void **keyfunc** (unsigned char key, int x, int y)
- void **makeEnemy** ()
- void **makeTurret** (float x, float y)
- void **drawEnemy** ()
- void **drawTurret** ()
- void **raster** ()
- void **drawBullets** (**PointF** posEnemy, int i)
- void **drawBullet** (**PointF** posEnemy, int i)
- void **path** ()

Variables

- const int **windowWidth** = 1024
- const int **windowHeight** = 768
- const char ∗ **windowTitle** = "Final Task: Tower Defense by Martyn van Dijke"

5.11.1 Function Documentation

5.11.1.1 void display ( )

Here is the call graph for this function:

Here is the caller graph for this function:

5.11.1.2 void drawBullet (PointF *posEnemy,* int *i*)

5.11.1.3 void drawBullets (PointF *posEnemy,* int *i*)

Here is the caller graph for this function:

5.11.1.4 void drawEnemy ( )

Here is the call graph for this function:

Here is the caller graph for this function:

5.11.1.5 void drawTurret ( )

Here is the caller graph for this function:

5.11.1.6 void init ( )

Here is the call graph for this function:

Here is the caller graph for this function:

5.11.1.7 void keyfunc (unsigned char *key*, int *x*, int *y*)

Here is the call graph for this function:

Here is the caller graph for this function:

5.11.1.8 int main (int *argc*, char * *argv[]*)

Here is the call graph for this function:

5.11.1.9 void makeEnemy ( )

Here is the caller graph for this function:

5.11.1.10 void makeTurret (float *x*, float *y*)

Here is the caller graph for this function:

5.11.1.11 void path ( )

Here is the caller graph for this function:

5.11.1.12 void raster ( )

Here is the call graph for this function:

Here is the caller graph for this function:

5.11.1.13 void reshape (int *w*, int *h*)

Here is the call graph for this function:

Here is the caller graph for this function:

5.11.2 Variable Documentation

5.11.2.1 const int windowHeight = 768

5.11.2.2 const char* windowTitle = "Final Task: Tower Defense by Martyn van Dijke"

5.11.2.3 const int windowWidth = 1024

5.12 OpenGLSkeleton/resource.h File Reference

Macros

- #define **IDI_ICON1** 101

5.12.1 Macro Definition Documentation

5.12.1.1 #define IDI_ICON1 101

5.13 OpenGLSkeleton/Turret.cpp File Reference

```
#include "Turret.h"
```
Include dependency graph for Turret.cpp:

5.14 OpenGLSkeleton/Turret.h File Reference

```
#include <array>
#include "drawtools.h"
```
Include dependency graph for Turret.h: This graph shows which files directly or indirectly include this file:

Classes

- class **Turret**

5.15 OpenGLSkeleton/zooi.cpp File Reference

Index