# R-Type

Generated by Doxygen 1.9.1

1 Class Index	1
1.1 Class List	1
2 File Index	3
2.1 File List	3
3 Class Documentation	5
3.1 Rtype Class Reference	5
3.1.1 Constructor & Destructor Documentation	5
3.1.1.1 Rtype()	6
3.1.2 Member Function Documentation	6
3.1.2.1 gameLoop()	6
3.1.2.2 handleEvents()	6
3.1.2.3 mainMenu()	6
3.1.2.4 processServerMessages()	6
3.1.2.5 renderGame()	7
3.1.2.6 run()	7
3.1.2.7 updateGame()	7
3.1.3 Member Data Documentation	7
3.1.3.1 _scenes	7
3.1.3.2 _window	7
4 File Documentation	9
4.1 /home/runner/work/R-Type/R-Type/Client/Interface/Include/mainmenu.hpp File Reference	9
4.1.1 Function Documentation	9
4.1.1.1 MainMenu()	9
4.2 /home/runner/work/R-Type/R-Type/Client/Interface/Include/r_type_client.hpp File Reference	9
4.3 /home/runner/work/R-Type/R-Type/Client/Src/main.cpp File Reference	10
4.3.1 Function Documentation	10
4.3.1.1 main()	10
4.4 /home/runner/work/R-Type/R-Type/Server/Src/main.cpp File Reference	10
4.4.1 Function Documentation	11
4.4.1.1 main()	11
4.5 /home/runner/work/R-Type/R-Type/Client/Src/r-type_client.cpp File Reference	11
4.6 /home/runner/work/R-Type/R-Type/Client/Src/scenes.cpp File Reference	11
4.7 /home/runner/work/R-Type/R-Type/Server/Src/server.cpp File Reference	11
Index	13

# **Class Index**

# 1.1 Class List

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

2 Class Index

# File Index

# 2.1 File List

Here is a list of all files with brief descriptions:

/home/runner/work/R-Type/R-Type/Client/Interface/Include/mainmenu.hpp
/home/runner/work/R-Type/R-Type/Client/Interface/Include/r_type_client.hpp
/home/runner/work/R-Type/R-Type/Client/Src/main.cpp
/home/runner/work/R-Type/R-Type/Client/Src/r-type_client.cpp
/home/runner/work/R-Type/R-Type/Client/Src/scenes.cpp
/home/runner/work/R-Type/R-Type/Server/Src/main.cpp
/home/runner/work/R-Type/R-Type/Server/Src/server.cpp

File Index

# **Class Documentation**

# 3.1 Rtype Class Reference

```
#include <r_type_client.hpp>
```

## **Public Member Functions**

• Rtype ()

Construct a new Rtype object This will init the player.

• void run ()

If \_mainMenu variable is true, call mainMenu.

• void mainMenu ()

Open window.

• void gameLoop ()

Open window.

• void handleEvents ()

This is where I will handle the events for the window & player (key input, etc.).

• void processServerMessages ()

This is where I will process the info from the server.

void updateGame ()

This is where I will update the time, position of sprites, etc.

• void renderGame ()

This is where I will render the game.

# **Private Attributes**

• Scenes \* \_scenes

Set the Game Mode object.

• sf::RenderWindow \_window

# 3.1.1 Constructor & Destructor Documentation

6 Class Documentation

## 3.1.1.1 Rtype()

```
Rtype::Rtype ( )
```

Construct a new Rtype object This will init the player.

Construct a new Rtype:: Rtype object.

Default easy mode and normal daltonism mode. Ex: renderSystem.addEntity(player), inputSystem.add← Entity(player), collisionSystem.addEntity(player), etc.

## 3.1.2 Member Function Documentation

## 3.1.2.1 gameLoop()

```
void Rtype::gameLoop ( )
```

Open window.

This is where I will call the handleEvents, updateGame, processCommands, and render functions.

#### 3.1.2.2 handleEvents()

```
void Rtype::handleEvents ( )
```

This is where I will handle the events for the window & player (key input, etc.).

When key is pressed, move player, and send new player info to server.

# 3.1.2.3 mainMenu()

```
void Rtype::mainMenu ( )
```

Open window.

(handleEvents). Display the main menu with start, help, daltonic mode, and speed selection buttons. On start, set \_mainMenu to false, close window, and return. When active, daltonic\_mode will be set to true, and draw a color filter over the screen until deactivated. Can set keybindings as well, either default or customized

#### 3.1.2.4 processServerMessages()

```
void Rtype::processServerMessages ( )
```

This is where I will process the info from the server.

#### 3.1.2.5 renderGame()

```
void Rtype::renderGame ( )
```

This is where I will render the game.

Ex: window.clear(), window.draw(background), renderSystem.render(window), window.display, etc.

#### 3.1.2.6 run()

```
void Rtype::run ( )
```

If \_mainMenu variable is true, call mainMenu.

While mainMenu is false, call gameLoop.

# 3.1.2.7 updateGame()

```
void Rtype::updateGame ( )
```

This is where I will update the time, position of sprites, etc.

Ex: inputSystem.update(deltaTime.asSeconds()), renderSystem.update(deltaTime.asSeconds()), etc.

## 3.1.3 Member Data Documentation

#### 3.1.3.1 \_scenes

```
Scenes* Rtype::_scenes [private]
```

Set the Game Mode object.

# Parameters

mode

#### 3.1.3.2 window

```
sf::RenderWindow Rtype::_window [private]
```

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

- /home/runner/work/R-Type/R-Type/Client/Interface/Include/r\_type\_client.hpp
- /home/runner/work/R-Type/R-Type/Client/Src/r-type\_client.cpp

8 Class Documentation

# **File Documentation**

4.1 /home/runner/work/R-Type/R-Type/Client/Interface/

Include/mainmenu.hpp File Reference

```
#include <SFML/Graphics.hpp>
#include <r_type_client.hpp>
```

## **Functions**

• int MainMenu (sf::RenderWindow \*window, Rtype \*rtype)

# 4.1.1 Function Documentation

## 4.1.1.1 MainMenu()

```
int MainMenu (
          sf::RenderWindow * window,
          Rtype * rtype )
```

4.2 /home/runner/work/R-Type/R-Type/Client/Interface/Include/r\_type\_← client.hpp File Reference

```
#include "error_handling.hpp"
#include "scenes.hpp"
#include <SFML/Graphics.hpp>
#include <SFML/Window.hpp>
```

10 File Documentation

# **Classes**

class Rtype

# 4.3 /home/runner/work/R-Type/R-Type/Client/Src/main.cpp File Reference

```
#include <r_type_client.hpp>
```

# **Functions**

• int main ()

The entry point of the program.

# 4.3.1 Function Documentation

# 4.3.1.1 main()

```
int main ( )
```

The entry point of the program.

This function initializes the Rtype object and runs the game.

#### Returns

0 indicating successful program execution.

int

# 4.4 /home/runner/work/R-Type/R-Type/Server/Src/main.cpp File Reference

```
#include <Net/server.hpp>
#include <iostream>
```

## **Functions**

• int main ()

#### 4.4.1 Function Documentation

## 4.4.1.1 main()

```
int main ( )
```

# 4.5 /home/runner/work/R-Type/R-Type/Client/Src/r-type\_client.cpp File Reference

```
#include <Components/component_manager.hpp>
#include <Entities/entity_factory.hpp>
#include <Entities/entity_manager.hpp>
#include <Systems/systems.hpp>
#include <iostream>
#include <r_type_client.hpp>
#include <texture_manager.hpp>
```

# 4.6 /home/runner/work/R-Type/R-Type/Client/Src/scenes.cpp File Reference

```
#include <Components/component_manager.hpp>
#include <Components/components.hpp>
#include <Entities/entity_factory.hpp>
#include <Entities/entity_manager.hpp>
#include <Net/client.hpp>
#include <Systems/systems.hpp>
#include <creatable_client_object.hpp>
#include <functional>
#include <iostream>
#include <r_type_client.hpp>
#include <scenes.hpp>
#include <texture_manager.hpp>
```

# 4.7 /home/runner/work/R-Type/R-Type/Server/Src/server.cpp File Reference

```
#include <Net/server.hpp>
#include <creatable_client_object.hpp>
```

12 File Documentation

# Index

```
/home/runner/work/R-Type/R-Type/Client/Interface/Include/mainupelate@pme, 7
/home/runner/work/R-Type/R-Type/Client/Interface/Include/r_typletyplie.nl.hpp,
                                                      updateGame
/home/runner/work/R-Type/R-Type/Client/Src/main.cpp,
                                                           Rtype, 7
/home/runner/work/R-Type/R-Type/Client/Src/r-type_client.cpp,
/home/runner/work/R-Type/R-Type/Client/Src/scenes.cpp,
/home/runner/work/R-Type/R-Type/Server/Src/main.cpp,
/home/runner/work/R-Type/R-Type/Server/Src/server.cpp,
scenes
    Rtype, 7
_window
    Rtype, 7
gameLoop
    Rtype, 6
handleEvents
    Rtype, 6
main
    main.cpp, 10, 11
main.cpp
    main, 10, 11
MainMenu
    mainmenu.hpp, 9
mainMenu
    Rtype, 6
mainmenu.hpp
    MainMenu, 9
processServerMessages
    Rtype, 6
renderGame
    Rtype, 6
Rtype, 5
    _scenes, 7
     window, 7
    gameLoop, 6
    handleEvents, 6
    mainMenu, 6
    processServerMessages, 6
    renderGame, 6
    Rtype, 5
    run, 7
```