

R-Type

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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

Chapter 1

Class Index

1.1 Class List

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

Rtype	5
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Chapter 2

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	9
/home/runner/work/R-Type/R-Type/Client/Interface/Include/r_type_client.hpp	9
/home/runner/work/R-Type/R-Type/Client/Src/main.cpp	10
/home/runner/work/R-Type/R-Type/Client/Src/r-type_client.cpp	11
/home/runner/work/R-Type/R-Type/Client/Src/scenes.cpp	11
/home/runner/work/R-Type/R-Type/Server/Src/main.cpp	10
/home/runner/work/R-Type/R-Type/Server/Src/server.cpp	11

Chapter 3

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

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.addEntity(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

<i>mode</i>	
-------------	--

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](#)

Chapter 4

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>
```

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>
```


Index

- [/home/runner/work/R-Type/R-Type/Client/Interface/Include/mainmenu.hpp, 7](#)
 - [9](#)
 - [run](#)
- [/home/runner/work/R-Type/R-Type/Client/Interface/Include/r_type_client.hpp, 7](#)
 - [9](#)
- [/home/runner/work/R-Type/R-Type/Client/Src/main.cpp, 10](#)
 - [updateGame](#)
 - [Rtype, 7](#)
- [/home/runner/work/R-Type/R-Type/Client/Src/r-type_client.cpp, 11](#)
- [/home/runner/work/R-Type/R-Type/Client/Src/scenes.cpp, 11](#)
- [/home/runner/work/R-Type/R-Type/Server/Src/main.cpp, 10](#)
- [/home/runner/work/R-Type/R-Type/Server/Src/server.cpp, 11](#)
- [_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](#)