

R·TYPE ONLINE®

R-Type Online

USER DOCUMENTATION

Sofia Bideaux bideau_s@epitech.eu
Vincent Munoz munoz_v@epitech.eu
Idriss Moutawakil moutaw_i@epitech.eu
Noélie Sylvain sylvai_n@epitech.eu
Barbara Lepage lepage_b@epitech.eu

Abstract: The famous scrolling shoot-em-up arcade game R-Type in a new version Online and Multi-player!



Contents

I	Introduction	2
I.1	What is R-Type?	2
I.2	R-Type Story	2
I.3	R-Type Online Updates	2
II	Installation	3
II.1	Linux	3
II.2	Windows	3
III	Start Server	5
III.1	Linux	5
III.2	Windows	5
IV	Start Game	6
IV.1	Linux	6
IV.2	Windows	6
IV.3	Problem?	6
V	Controllers	7
VI	Game Usage	9
VI.1	Join Game	9
VI.2	Create Game	11
VI.3	Play Game	14
VII	Settings	17
VII.1	Global Configuration	17
VII.2	Get IP on Windows	19
VII.3	Get IP on Linux	19
VIII	Credits	21
VIII.1	Authors	21
VIII.2	Details	21
VIII.3	Partners	22



Chapter I

Introduction

I.1 What is R-Type?

R-Type is a side scrolling shoot-em-up arcade game produced by Irem in 1987. The player controls a space fighter named R-9a “Arrowhead” to defend humanity against a mysterious but powerful alien life-form known as “Bydo”, which was later discovered to be not entirely alien in origin. R-Type is recognized as one of the classics of the shooter genre from the 1980s arcade.

I.2 R-Type Story

R-Type is set in the 22nd century, and the player flies a futuristic fighter craft called the R-9a “Arrowhead”, named for its shape, and because it is the ninth model in the ‘R’ series of fighter craft (but it is the first of the series to actually be used in combat; the previous models were all prototypes). The mission is to ‘blast off and strike the evil Bydo Empire’. The significance of the R- in the series title refers to the production code as well as the term of endearment for the player fighter craft, the “Round Canopy”.

I.3 R-Type Online Updates

This new version provide a new dimension to the classic R-Type Game : Online Gaming in multi-player. You can launch a server and share it with friends all around the world. You can have a game up to 4 players at the same time. Non-player can watch the game. There is also a World Ranking!



Chapter II

Installation

II.1 Linux

- You must compile it first.
- Install CMake and other dependencies libraries.
- Open a terminal.
- Move to the directory containing the sources using `cd`.
- Type :

```
1 #> cmake .
2 #> make
```

- If compilation fails, it means :
 - Some libraries are missing.
 - Your operating system is not compatible.

II.2 Windows

- Download Installer and CMake.
- Launch Installer.



- It ask you “Where is the source code?”. Select the directory where the R-Type source code is.
- It ask you “Where to buold the binary?”. Select the directory where you want the binary (“.exe” file) to be.
- Click on “Configure”.
- Choose the “Virtual Studio” compiler.
- When it is finished, click on “Generate”.



Chapter III

Start Server

III.1 Linux

- Open a terminal.
- Move to the directory containing the sources using cd.
- Type :

```
1 #> ./bin/server
```

- If you want to launch it in the background, type :

```
1 #> ./bin/server &
```

Or, if you want it to stay launched even if you close the current terminal :

```
1 #> screen ./bin/server
```

III.2 Windows

Double-click on the server.exe file generated by the compiler.



Chapter IV

Start Game

IV.1 Linux

- Open a terminal.
- Move to the directory containing the sources using cd.
- Type :

```
1 #> ./bin/client
```

IV.2 Windows

Double-click on the client.exe file generated by the compiler.

IV.3 Problem?

If it is not working, it means :

- You have not correctly set your graphic card configuration.
- The executable is not compiled for your architecture, you must compile it again (see "Installation" part).
- The game is not compatible for your operating system.

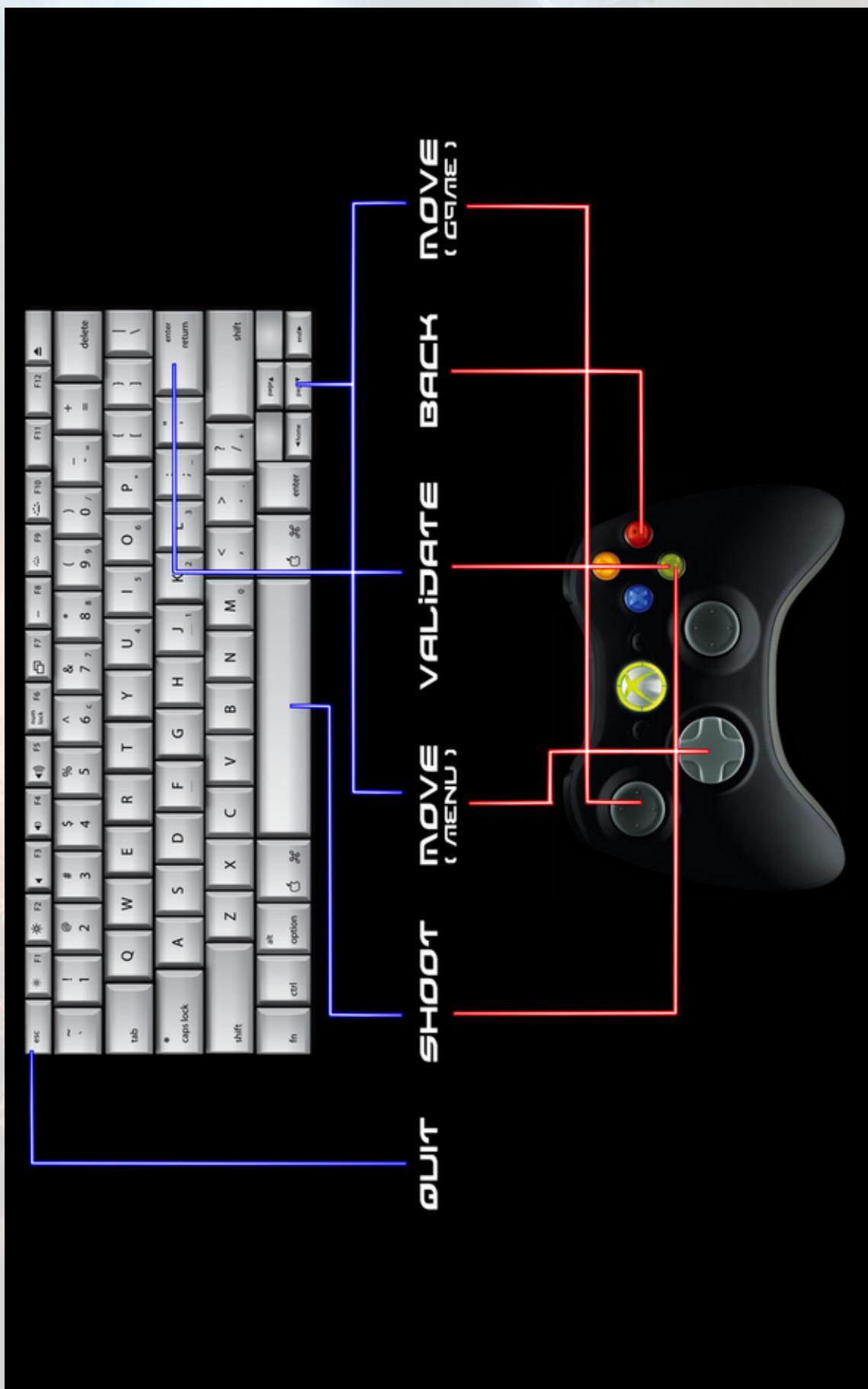


Chapter V

Controllers

See next page.



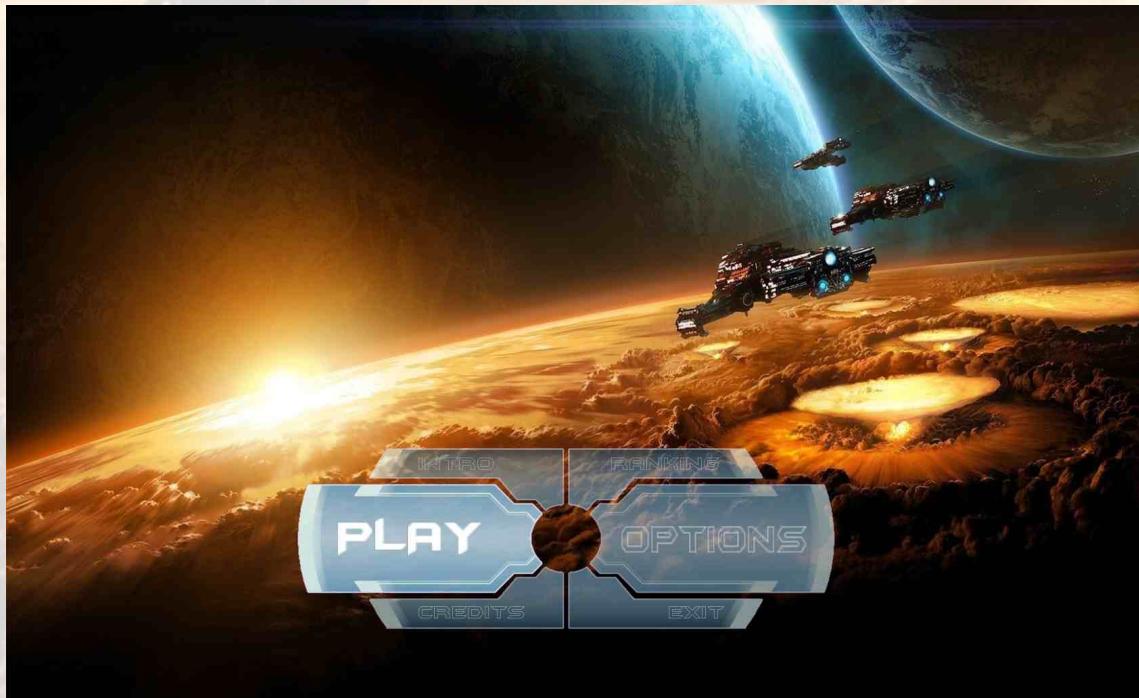


Chapter VI

Game Usage

VI.1 Join Game

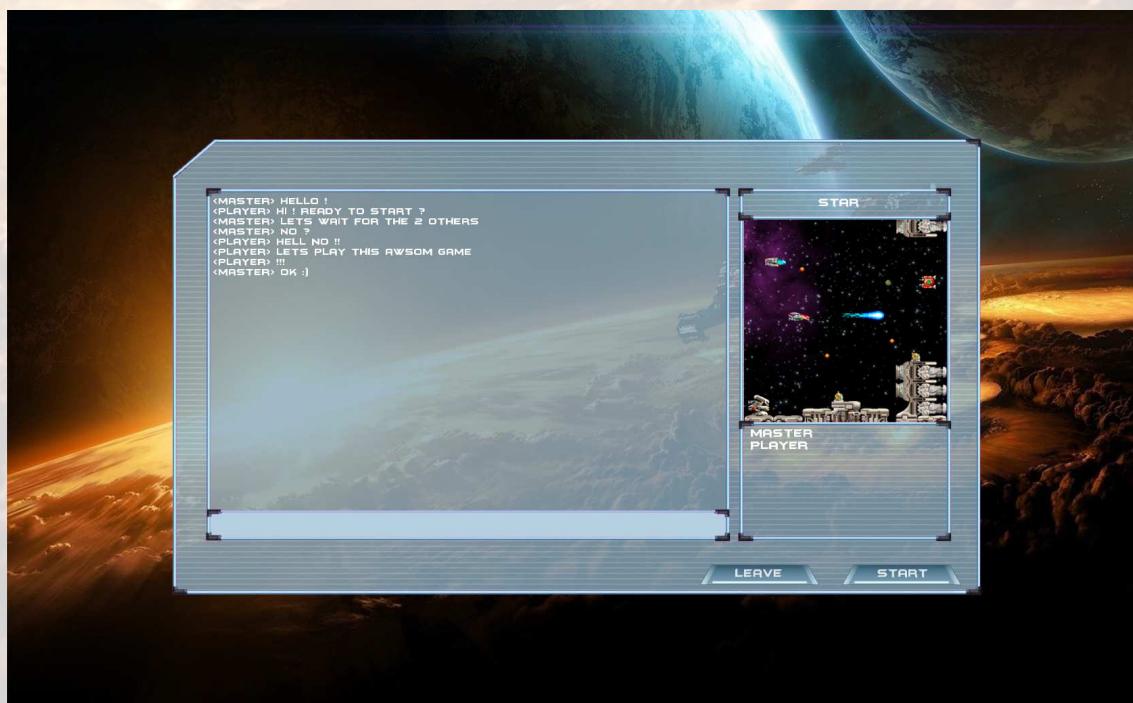
- Launch the game.
- The menu appears :



- Select the “Play” button.
- The list of games appears :



- Select a game.
- The game lobby appears :



- You can now chat with other players.
- When the owner of the game is ready, the game will start.



VI.2 Create Game

- Launch the game.
- The menu appears :

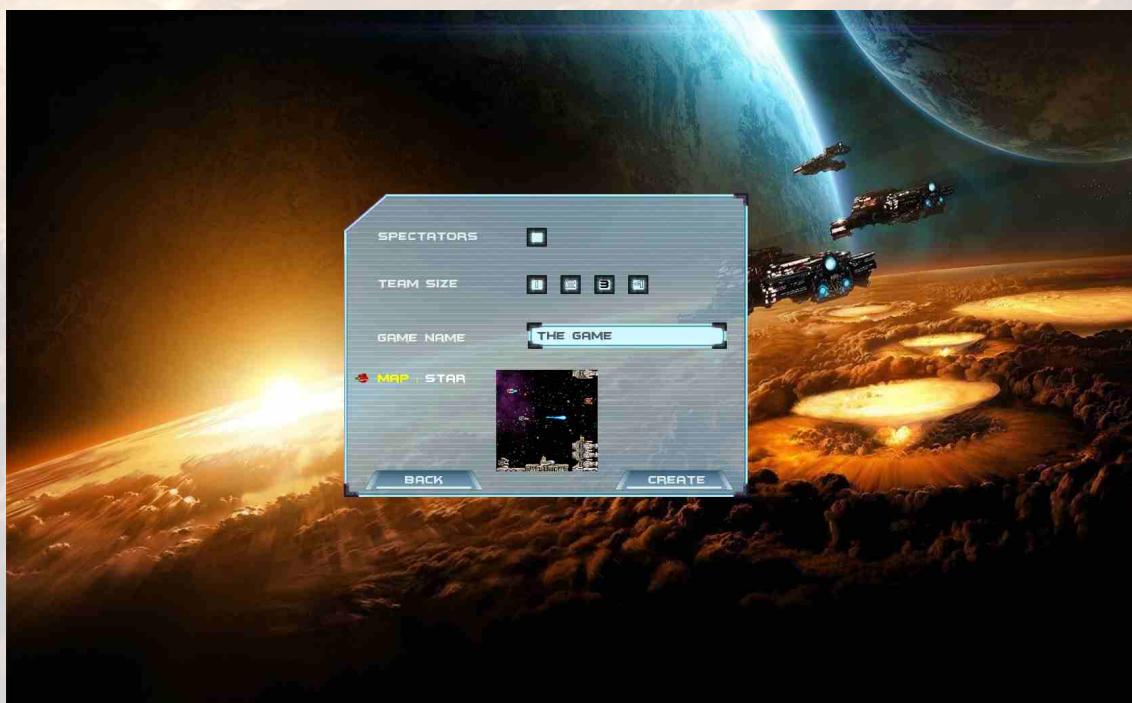


- Select the “Play” button.
- The list of games appears :





- Select the “Create” button.
- The Game Creation Menu appears :

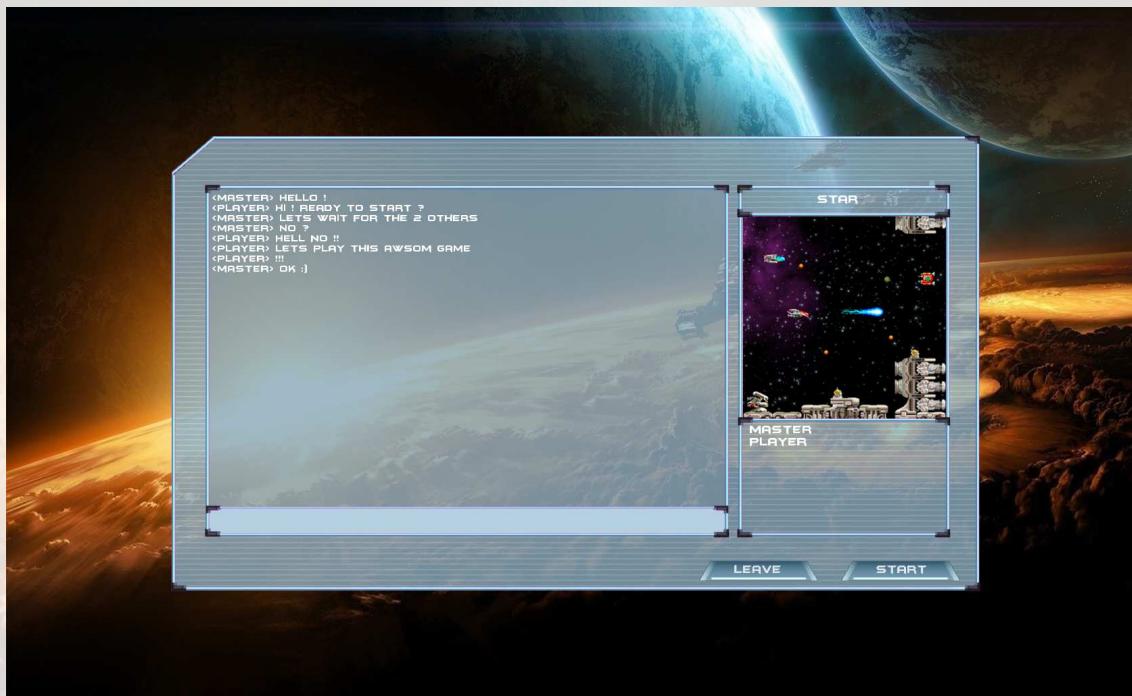


- Set the settings you want :

- The “Spectators” checkbox allow you to choose if non-player can watch the game without playing or not.
- The team size is the maximum player you want in this game.
- The game name is an identifier that you can give to your friends so they will know which game they have to join to play with you.
- They are several maps available. Choose your favorite!

- Select the “Create” button.

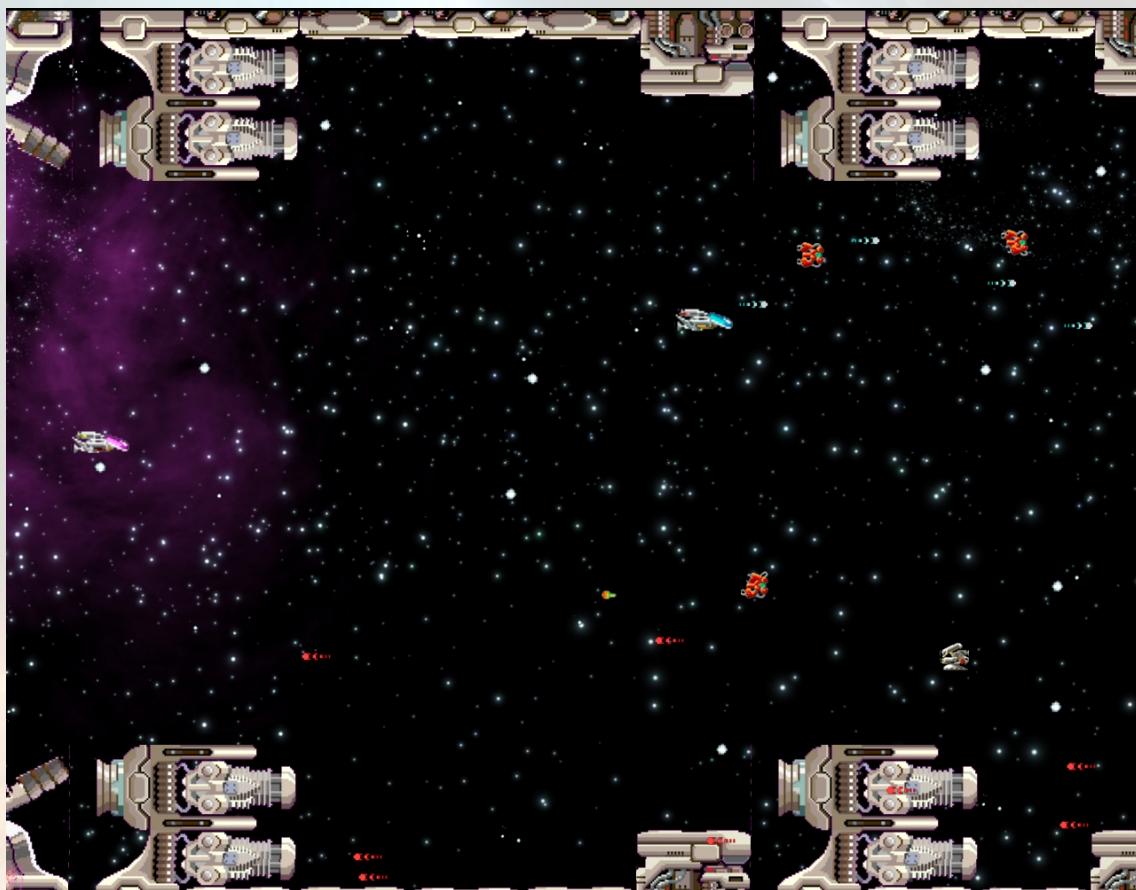
- The game lobby appears :



- You can now chat with other players.
- When you are ready, select the “Start” button.
- The game start!



VI.3 Play Game



- See “Controllers” part to know which buttons or keys you must use.
- Move your spaceship to avoid enemy and their bullets.



- Be carrefull of not touching ground or ceiling of the map.



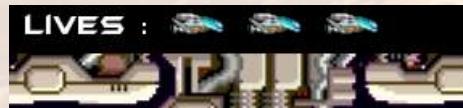
- Fire enemies using the shoot button.



- When an enemy receive one of your bullet or one of the other players bullet, it died and you get points.



- You must play in team against the enemies.
- The winner is the last alive.
- You have some “lifes”. Everytime an ennemy’s bullet touch you, you lost one.



- If you lose all your lifes, you lost the game.
- When you lost, you can watch other players.
- When all players lost, the game is over :

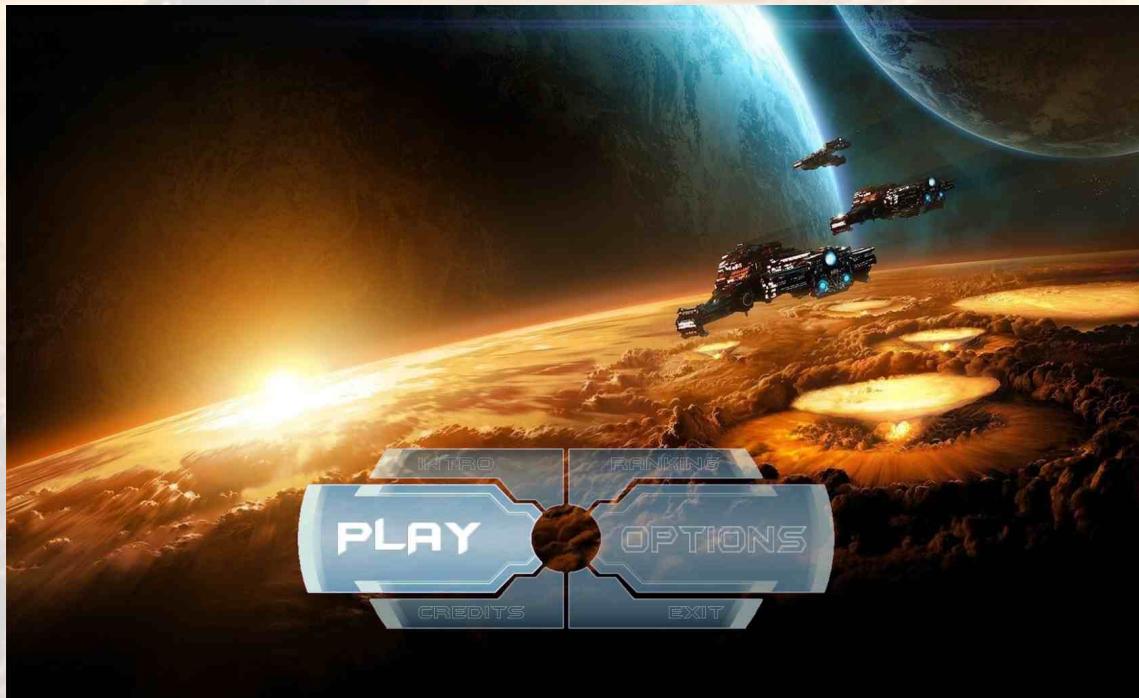


Chapter VII

Settings

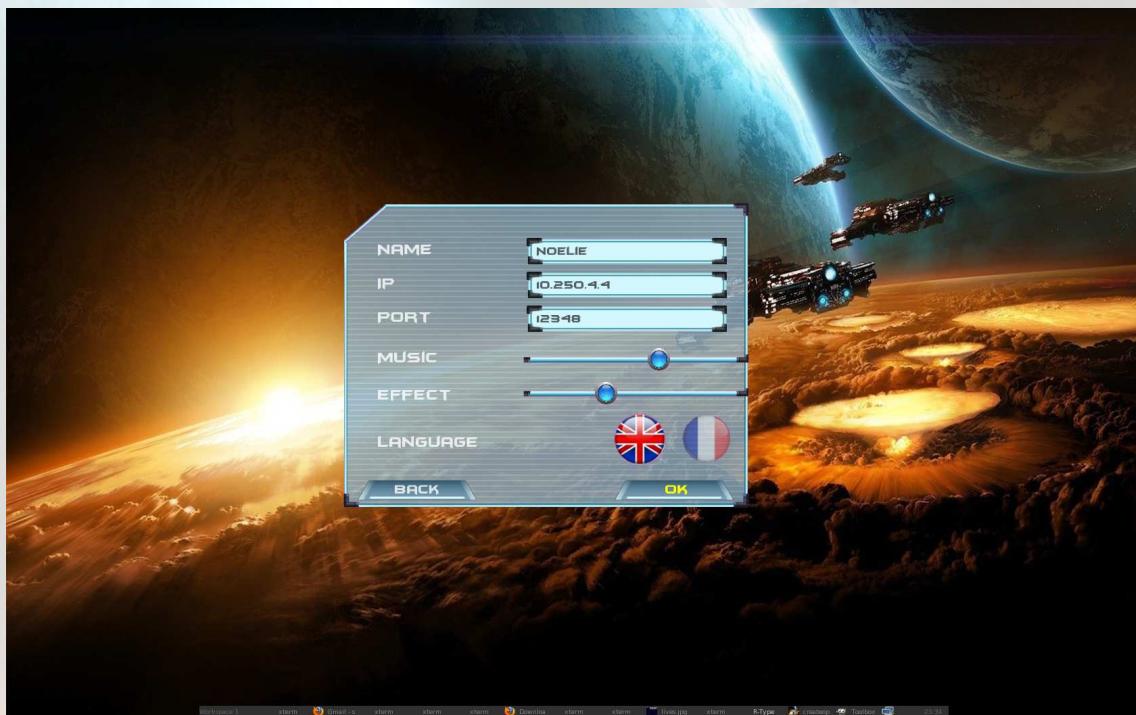
VII.1 Global Configuration

- Launch the game.
- The menu appears :



- Select the “Options” button.
- The Options menu appears :





- “Name” is your personnal identifier. We advise you to change it :
 - The default name is probably already taken.
 - Other players can recognize you.
- The “IP” is the Server IP.
 - If you don’t know the Server IP, ask the Server Owner.
 - If the server is launched on your computer, set 127.0.0.1.
 - If you want to share a server to the others, you must get your server IP to give it to the others. See “Get IP” part.
- The “Port” is the Server Port.
 - If you don’t know the Server Port, ask the Server Owner.
 - If you want to share a server to the others, you must select a port.
 - By default, the port is “12348”.
 - To set another port, use the -p option while launching the server.



- Share the port with other players.
- A music is playing during the game. You can set the volume for your convinience using this button.
- When enemies and players shoot bullets or when they die, a little sound is playing. You can set the volume for your convinience using this button.
- Choose your langage using these buttons. Two langages are available :
 - English (default)
 - French

VII.2 Get IP on Windows

- Open the “Start” menu.
- Type “cmd”.
- On the command line interpreter, type :

```
1 #> ipconfig
```

- Get your IP. It look likes this :

```
1 10.224.15.11
```

VII.3 Get IP on Linux

- Open a terminal.
- Type :



```
1 #> ifconfig
```

- Get your IP. It look likes this :

```
1 10.224.15.11
```

Chapter VIII

Credits

VIII.1 Authors

- Sofia Bideaux (bideau_s@epitech.eu)
- Vincent Munoz (munoz_v@epitech.eu)
- Idriss Moutawakil (moutaw_i@epitech.eu)
- Noélie Sylvain (sylvai_n@epitech.eu)
- Barbara Lepage (lepage_b@epitech.eu)

VIII.2 Details

- Project Leading : Bideaux Sofia
- Threading library : Bideaux Sofia, Sylvain Noelie
- Dynamic loading library : Bideaux Sofia
- Game mechanics : Munoz Vincent
- Project portabilities : Munoz Vincent
- Dynamic monsters library : Munoz Vincent, Bideaux Sofia
- Map generator : Munoz Vincent
- Networking library : Sylvain Noelie
- Graphic design : Sylvain Noelie, Moutawakil Idriss



- Networking protocol : Sylvain Noelie, Lepage Barbara
- Packet design : Lepage Barbara, Sylvain Noelie
- Protocol documentation : Sylvain Noelie, Munoz Vincent, Lepage Barbara
- Lead designer : Moutawakil Idriss
- Graphic rendering : Moutawakil Idriss, Sylvain Noelie
- Graphic creations : Moutawakil Idriss, Sylvain Noelie, Baradel Audrey
- Music and effects : Moutawakil Idriss
- General conception : Moutawakil Idriss
- Manual : Lepage Barbara
- Special Thanks : Baradel Audrey

VIII.3 Partners

- Epitech, The school of innovation and IT expertise.
- Koalas, “Kind of Advanced Langage Assistants”, Epitech C++ assistants.
- Pandas, assistants of the “Game Dev Lab”, Epitech Laboratory of video games.

