

# ***SPHERE RUN***

## ***User Manual***



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*User Manual*



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# Setting Up

## Download

Before you download the game make sure you have Java version 8 or later installed on your computer.

Then, visit <https://sphererun.ch> and click the download button. You will be prompted to save a .zip file with a name similar to *Sphere-Run-1.0.0*. Continue by unzipping this file. It will contain a .jar file of the same name and a .bat file called *server-start*.

## Server

To play the game you need to connect to a server. In order to do so a server must be running on a computer that is in the same network as your computer. If this is not the case, you will need to start one yourself.

Open your command prompt and navigate to the folder the .jar file you previously downloaded is in. Depending which operating system, you are using, this process is different.

For **Windows** users, we have provided a handy start file called `server-start.bat`. Simply double click this file and a server will launch.

On **Mac OS**, open Terminal by pressing `CMD+Spacebar`, typing *Terminal* and pressing enter or launching it from your Applications folder. Then navigate to the folder the `.jar` file is in by typing

```
cd path/to/file/
```

and pressing enter. Finally, type

```
java -jar Sphere-Run-1.0.0.jar server
```

to launch the server.



**Note** that you need to type the name of the `.jar` you downloaded.

If you are a **Linux** user, you probably know how to do this already. Open the Linux command line and proceed like just described for Mac OS.

Once a server is started successfully it will display the IP address and port it is running on. Use this Information when connecting to it.

```
10:10:00.000 [main] INFO sphererun.server.Server - Hosting server on 192.168.1.1:4504. Waiting for connection...
```

*Display of IP address and port (ip:port)*

If you would like to use a different port number for your server, add it to the start command.

```
java -jar Sphere-Run-1.0.0.jar server 4504
```

To stop the server, type *stop* into the command prompt and press enter.

# Setting Up

## Client First Steps

Starting a client to actually play is similar to starting a server. If you are running the server on the same computer, simply double click the .jar file. If you want to connect to a server proceed to open your system's command line and navigate to the folder the -jar file is in as described before. Use the command

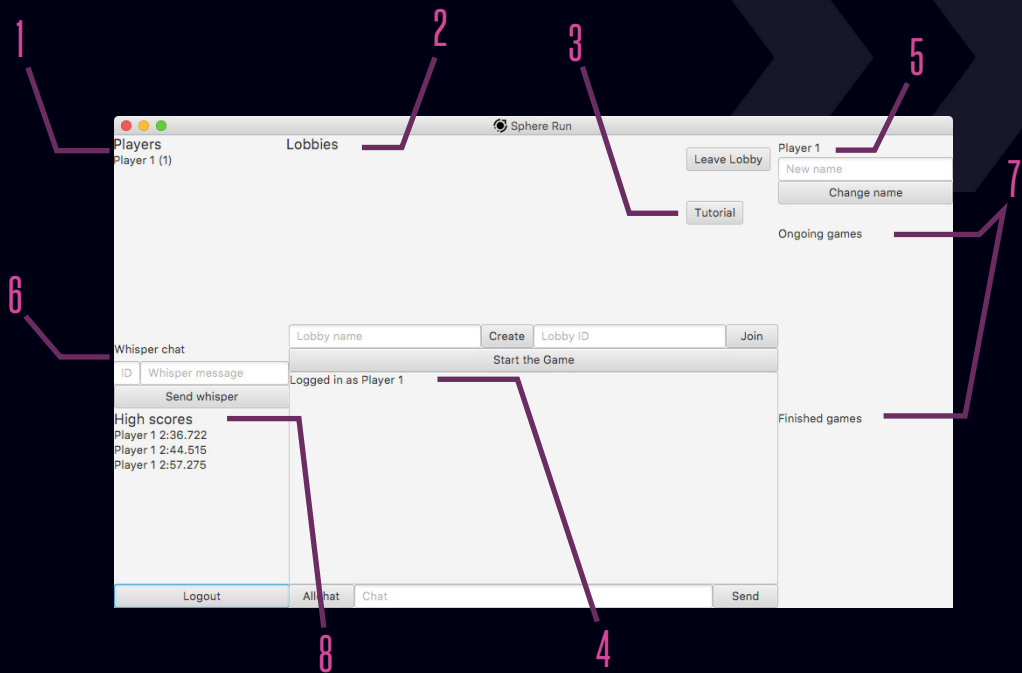
```
java -jar Sphere-Run-1.0.0.jar client ipaddress:port
```

to start a client and connect to a server. If you want to use a special nickname add it to the end of the command, otherwise it will use your system user name. It should then look something like

```
java -jar Sphere-Run-1.0.0.jar client  
192.168.1.1:4504 Username
```

When starting a client, you will be greeted with this window.





This is the main client window. From here, you can send chat messages, join lobbies and start games.

## 1 Players

All players that are logged in on the server are displayed in this list with their name and id. If they have joined a lobby, it will be shown next to their name.

## 2 Lobbies

This list shows every lobby that is open and has not been started yet. The lobby's name and id is displayed. You can create a lobby using the left text field below the list. Type the name you want your lobby to have into the field and click *Create*. To the right of the create button you will find the join field. Enter a lobby's id into this text field and click *Join*. Lobbies can hold up to four players. If a lobby is full, you cannot join and a message will be displayed to notify you of this. In case you want to leave a lobby, click the *Leave Lobby* button. To start a game, click the *Start the Game* button, but make sure you are in a lobby first.

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### **Tutorial**

You can try out the game's mechanics in the tutorial. Click the *Tutorial* button to start it.

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### **Chat**

The chat window is displayed in the bottom centre. Below it is a text field to send chat messages and two buttons. To send a chat message, type your message in the text field and then click the *Send* button or press enter. If you are in a lobby, your message will only be displayed to the members of that lobby. To send a message to the global server chat, use the *Allchat* button instead of *Send*.

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### **Name and name change**

Your name is displayed in the top right. To change it, type your new name in the text field below and click the *Change name* button or press enter. Names have to be unique, so if you try to change your name to another player's, the new name will be made unique by the server.

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### **Whisper**

You can send messages to specific players privately using the whisper function. Below the player list, enter a player's id and a message and click the *Send whisper* button.

7

### **Gamelist**

On the right, a list of all ongoing and finished games is displayed.

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### **High Scores**

A server will keep track of the best times players have achieved. This list is displayed in the bottom left.

## Chat commands

All client functionality is also available through in-chat commands you can type in the chat text field.

`/create <lobby name> or /c <lobby name>` to create a lobby

`/join <lobby id> or /j <lobby id>` to join a lobby

`/start or /s` to start a game

`/leave or /l` to leave a lobby

`/all <message> or /a <message>` to use allchat when you are in a lobby

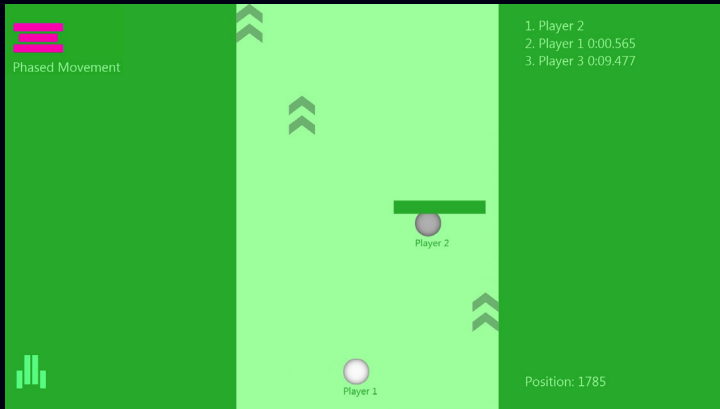
`/changenname <new name> or /cn <new name>`

`/whisper <player id> <message>` or  
`/w <player id> <message>` to send a whisper message

`/logout` to log out and quit the client

# Start Playing

## Course and Objective



In Sphere Run, you are a sphere moving on a track, trying to go as fast as possible without crashing into obstacles. Your goal is to reach the finish line first. In addition to walls you should avoid crashing into, you will find booster pads which give you a speed boost when rolling over and power ups which you can use to get an advantage over your opponents.

Your sphere is displayed in white at the bottom of your screen, your opponents are drawn in gray. Your position on the track is displayed in the bottom right to help you know how much of the track is left. In the top right is a rank list that shows the time difference between players. This can help you estimate where your opponents are. Once you collect a power up, the top left will show which power up you collected. Once you used it, depending on whether it is an attack or a buff for yourself, the bottom left will show the effect. The bottom left shows all effects that are applied to your sphere. If you get hit by an opponent's attack for example, the bottom left will show that too.

# Controls

To move your sphere, use either your left and right arrow keys or your A and D keys. Once you have collected a power up, use it by pressing the shift key or the space bar. Should your keys ever get stuck press CTRL to reset them.

To play the game in fullscreen mode use the F11 key.

# Obstacles

On the track, you will find three types of obstacles

## Walls



When you collide with a wall, you will come to a temporary one second halt before taking off again. After colliding, you will be invincible for two seconds.



## Booster Pads

Rolling over a booster pad will make you twice as fast for two seconds. Speed boosts do not multiply, they simply get renewed.



## Power Ups

When collecting a power up item, you will receive a random power up which you can use by pressing the power up keys. Several different power ups can be collected.

# Start Playing

## Power Ups & Effects



### Speed Boost

You will move twice as fast for two seconds.  
This is the same as rolling over a booster pad.



### Phased Movement

You will be immune to collisions for three seconds.



### Blink

Move very quickly for a short time.



### Slow

A random opponent will be slowed for two seconds.



### Root

A random opponent will be held in place for two seconds.



### Collision & Invincibility

When you collide with a wall a collision and an invincibility effect will be applied to your sphere for one and two seconds respectively.



# *In Closing,*

we would like to thank the University of Basel, Professor Heiko Schuldt and all assistants for offering this course. It is a welcome exception to the usually theory heavy lectures.

We also want to thank Sophia Luu for helping design this manual.



