



Novel Games

**Rock Paper Scissors
(Flash ActionScript 3.0 Version)
Customization Guide**

Version 1.10.0



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Introduction

This document describes the source codes of Rock Paper Scissors (Flash ActionScript 3.0 Version) and the ways to customize the game.

Rock Paper Scissors is a multi player game that can be played by 2 players on the Internet. To allow the players to communicate with each other, a server is needed to route the messages among different instances of the game. You can use our Free Lobby Module (available here: <http://business.novelgames.com/otherdownloads/lobby/>) or your own server for this purpose.

In order to use the source codes, Adobe Flash Professional CS4 or above should be installed in your computer. You should possess basic knowledge of the Flash authoring environment, such as the steps to modify a picture, the steps to change the value of a variable, etc.



Directory Structure

The source codes are arranged in the following directory structure:

```
+
+-- rockpaperscissors.pdf (this file)
+-- common
|   +-- com
|       +-- novelgames
|           +-- multiplayerflashgames
|               +-- common
|                   +-- MainDevelopment.as
|                   +-- other ActionScript 3.0 .as files
+-- rockpaperscissors
+-- rockpaperscissors_e.fla (for English version)
+-- rockpaperscissors_e.swf (for English version)
+-- rockpaperscissors_e.htm (for English version)
+-- com
+-- novelgames
+-- multiplayerflashgames
+-- rockpaperscissors
+-- Config.as
+-- other ActionScript 3.0 .as files
```

To build the game, open `rockpaperscissors\rockpaperscissors_e.fla` in Flash CS4 and then publish it. The file `rockpaperscissors_e.swf` in the same directory is the compiled SWF file for your reference.

The file `rockpaperscissors_e.htm` contains sample HTML codes for you to use in your website.

All the ActionScripts are arranged in class files in the `rockpaperscissors\com\novelgames\multiplayerflashgames\rockpaperscissors` folder.

Depending on the customization you would like to make, different files need to be modified:

- 1) To change the graphics and the sounds, please edit the FLA file.
- 2) To tune the parameters of the game, please edit the Config.as file.



- 3) To change the way that the game communicates with other players, please edit the MainDevelopment.as file.
- 4) To change the behavior of the game but such changes cannot be made by tuning the game parameters as in 2) above, please edit the ActionScript .as files.

Points 2) and 3) will be discussed in later sections.



Testing the Game in the Flash Authoring Environment

We have designed a mechanism so that you can test the Multi Player Games in the Flash authoring environment by pressing Ctrl + Enter, just like dealing with the Single Player Games. The following example demonstrates the way to test a game to be played by 3 players:

- 1) Open the FLA file, then press Ctrl + Enter. Click the "START" button in the game, and a dialog box will pop up. This is for the first player.
- 2) Double click the compiled SWF file, then click the "START" button in the game. This is for the second player.
- 3) Double click the compiled SWF file again, then click the "START" button in the game. This is for the third player.
- 4) Now we have 3 instances of the game running in the same computer, with each instance representing 1 player. Click the dialog of any of the game instances, and the game will start.



Setting Up the Game for Playing over the Internet

By default, the game is in testing mode so that you can test and customize it easily and quickly. If you want to put the game in a web page and let players play over the Internet, the following settings have to be done.

Follow these steps to set up the game for playing over the Internet:

- 1) Download our Free Lobby Module here: <http://business.novelgames.com/otherdownloads/lobby/>
- 2) Open Lobby.fla from the downloaded file, then drag the Lobby item from its Library to the top of the main timeline of the game FLA file
- 3) Give the Lobby item an instance name of `lobby`
- 4) Edit MainDevelopment.as: in each of the functions from `showRooms()` to `disconnect()`, change `TestLobby` to `this['lobby']`
- 5) Publish the SWF file of the game, then upload the game SWF file together with the PHP files in the Free Lobby Component package to the website
- 6) The set up is now complete. Open a web browser and navigate to the uploaded game to test it.

This covers the most basic set up only. For detailed instructions about the usage of the Free Lobby Module, please refer to its User Manual.



The Configuraton File (Config.as)

This section explains the parameters in Config.as and the ways they affect the behavior of the game.

Unless otherwise stated, the units of the parameters are expressed as follows:

- length units are in pixels;
- time units are in milliseconds;
- angle units are in degrees;
- speed units are in pixels per second;
- rotation speed units are in degrees per second;
- acceleration units are in pixels per second squared;
- color units are in 0xRRGGBB format.

Parameter	Description
ARM_SHOWTIME	The time that the hand will take to show
ARM_LENGTH	The length of a hand
TABLEMARK_WIDTH	The width of a mark on the results table
TABLEMARK_HEIGHT	The height of a mark on the results table
NOOFROUNDS	The number of rounds to play
MESSAGE_RESULTWAITTIME	The time to wait for before the result shows
MESSAGE_RESULTSHOWTIME	The time that the result will be shown for
MESSAGE_OVERALLRESULTTIME	The time that the overall result will be shown for
MESSAGE_DISCONNECTEDTIME	The time that the Disconnected message will be shown for
CHAT_SELF	The position of the chat bubble for the player
CHAT_OPPONENT	The position of the chat bubble for the opponent



Robot

The robot is included in this game. If you are using our Free Lobby Module, you can play with the robot after setting the robotName parameter of the Module.



Site Locking

Site locking is a mechanism to lock the game to a particular website so that the game can only run on that website. This is used to forbid unauthorized parties from downloading the game SWF file and uploading them to their own websites. Do not enable site locking if you plan to redistribute the game SWF file to third-party websites, otherwise the game will not be able to run on those websites.

To enable site locking and to set the websites to lock the game SWF file to, modify the function `checkSiteLock` in `MainDevelopment.as`:

```
public function checkSiteLock():Boolean {
    var siteLockWebsites:Array = [];
    ...
}
```

Update the `siteLockWebsites` Array so that it contains the host names of the websites to lock to, e.g.

```
public function checkSiteLock():Boolean {
    var siteLockWebsites:Array = ['*.novelgames.com',
    'www.yahoo.com'];
    ...
}
```

In the example above, the game SWF file can only run on the websites that end with `novelgames.com` (e.g. `www.novelgames.com`, `games.novelgames.com`, etc.) and on `www.yahoo.com`.



Troubleshooting

If compiler errors occur when you are compiling the games, try the following:

- 1) Select "Control" and then "Delete ASO Files" on the menu bar
- 2) Compile the game again

If compiler errors still occur, try the following:

- 1) Select "Control" and then "Delete ASO Files" on the menu bar
- 2) Restart Flash
- 3) Compile the game again

If compiler errors still occur, try the following:

- 1) Select "Control" and then "Delete ASO Files" on the menu bar
- 2) Edit all the .as files (for example by adding a space at the end), then save the files
- 3) Restart Flash
- 4) Compile the game again

If compiler errors still occur, please contact us at support@novelgames.com

Modification History

Version	Date	Description
1.10.0	2012-09-12	Removed game.js and updated the color scheme of the document
1.9.0	2012-06-06	Separated AS3 and AS2 versions
1.8	2011-2-18	Fixed typos
1.7	2010-10-29	Added section about Robot
1.6	2010-8-2	Added section about site locking
1.5	2010-5-18	Added CHAT_SELF and CHAT_OPPONENT parameters
1.4	2010-4-9	Added instructions about the Free Lobby Module
1.3	2009-3-10	Added the ranks parameter to the gameEnded function, and added the functions to support the view function
1.2	2008-11-20	Updated Introduction to include information about the possible number of players
1.1	2008-11-12	Updated Optional Functions section with information about the More Games link
1.0	2008-8-11	First Draft