

## Work Sample Instructions

The goal of this work sample is to construct a game called "Colour Memory". The game board consists of a 4x4 grid, all in all 16 slots. All slots consist of cards face-down. The player is to flip two of these upwards each round, trying to find equals. If the two cards are equal, the player receives one point, and the cards are removed from the game board after 2 seconds. Otherwise, the player loses one point and the cards are turned face-down again after 2 seconds. This continues until all pairs have been found.

The 8 different colors to be used for the cards should be read from the configuration file (see below) when the game loads. The configuration file contains at most one HEX colour string on each line. The conf file might also contain comments, which start with ";" and apply for the rest of the line on which they are written. Comments should be ignored when reading the configuration.

## Configuration file

[http://labs.funspot.tv/worktest\\_color\\_memory/colours.conf](http://labs.funspot.tv/worktest_color_memory/colours.conf)

## Requirements

1. The game should work in Firefox 4+.
2. The game should be developed using only (X)HTML, JavaScript and CSS. (A proxy done in PHP is allowed, if clearly motivated).
3. The game should be playable by using only the arrow keys (UP/DOWN/LEFT/RIGHT) for navigation, and the return key (ENTER) for selection.
4. The game should fit entirely inside an area of 720x576 pixels.
5. The game info area should contain information about the current game session, for instance "Current score". Be creative.
6. The restart button should start a new round when selected.
7. You have to figure out a way to highlight which screen element is focused, including the restart button.
8. The player is not allowed to navigate onto an area where there is no card, ie. where there used to be a card but that card has been removed. The marker should jump to an appropriately chosen available card if the player attempts to navigate onto an empty area.
9. When the game is over, the player should be notified of this. This notification should include an option to play another round.

## Guidance

- The configuration file can be read by requesting the file using an AJAX GET request.
- You will encounter the "cross domain" / "same origin" security problem here.
- Solve this in an appropriate manner.
- Firebug is a useful tool for developing this kind of application.
- You may modify the configuration of the web server hosting the app if needed. Please provide a clear motivation of why and instructions on how to modify.
- The game logotype and the graphics for the back of the card have been supplied.

The rest is up to you to. Impress us!

## Delivery

Your implementation of Colour Memory should be delivered in a compressed archive containing all the necessary files and resources.

Note that we want to see the source code as well.

You should also provide clear instructions on how to install and start the application on one of our servers – including any required modifications on the server configuration.



**Illustration 1: Game design for Colour Memory**