

Coder Dojo 2012-02-25

HTML5 Shuffle Puzzle
CONTINUED

Question 1:

Search Engines and the Web

- ☐ <http://www.w3.org/1999/xhtml>
- ☐ http://www.wikipedia.org/wiki/Higher_education
- ☐ http://www.wikipedia.org/wiki/Sebastian_Thrun
- ☐ both high quality and low cost
- ☐ http://www.wikipedia.org/wiki/Digital_Life_Design

UDACITY.com - Build a search engine
[UDACITY Webcrawler](#)



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playfic.com, make your own text adventure

MineCraft Servers and networking

LAST week...

Just display

github.com/willknott
github.com/coderdojo

Last week's slides, code (puzzle1)
and images are available

Next, create a function to start the Puzzle

```
function initPuzzle(){  
    pieces = [];  
    mouse = {x:0,y:0};  
    currentPiece = null;  
    currentDropPiece = null;  
    stage.drawImage(img,  
        0, 0, puzzleWidth, puzzleHeight,  
        0, 0, puzzleWidth, puzzleHeight);  
    buildPieces();  
}
```

//Initializing bits for later

Huh? You created these variables...

```
currentPiece = null;
```

```
currentDropPiece = null;
```

Null means "No value".

```
mouse = {x:0,y:0};
```

This is a full one value array...and an object.

Think about it, what does a mouse position consist of...

```
pieces = [];
```

This is an empty array

What is an array?

http://www.w3schools.com/js/js_obj_array.asp

An array is a variable that can contain more than one value.

You can declare a complete array, or, push values on to an array.

For

We are about to hit a for loop

http://www.w3schools.com/js/js_loop_for.asp

```
for (variable=startvalue;  
    variable<=endvalue;  
    variable=variable+increment)  
{  
    do something  
}
```

Now let's make a function to split our image into pieces

```
function buildPieces(){
    var i;
    var piece;
    var xPos = 0;
    var yPos = 0;
    for(i = 0;
        i < (PUZZLE_DIFFICULTY * PUZZLE_DIFFICULTY);
        i++){
        piece = {}; //new object
        piece.sx = xPos;
        piece.sy = yPos;
        pieces.push(piece);
        //add this object to the pieces array
    }
}
```

Continued from last page

```
xPos += pieceWidth; //move a piece to the right

if(xPos >= puzzleWidth){
    // if we fall off the edge of the image
    xPos = 0;
    //back to the left edge
    yPos += pieceHeight;
    // and move down one
} // end of if
} //end of for
document.onmousedown = shufflePuzzle;
}
```

After dividing up our image, we need to shuffle them around.

Or cheat by just reversing the order

```
function shuffleArray(o)
{
    return o.reverse();
}
```

http://www.w3schools.com/jsref/jsref_reverse.asp

Yes this does make a crap game.

We'll look at shuffling and other mathematics next time.

And we've run out of time

We'll continue this next week