

CPSC101/WMST 201 Javascript Image Lab

This is a "skeleton" of the code for the puzzle lab. We will use this in class as we discuss what you need to do in the lab.

```
<html>
  <head>
    <title>Puzzle Game</title>

    <script language='JavaScript'>
      var totalPieces = 9;          // total number of picture pieces

//-----
//
// Function: initialize
// Description: Entry point for the whole game. It is invoked when
// user clicks "Confirm" Button. This function retrieves all the
// pieces for the picture, and then shows the "New Game" button and
// initial layout of the picture to the user.

function initialize() {
  details omitted; they are not necessary for your work
  but there are two things you should know, which the omitted code arranges:
  1. when the user clicks on the "New Game" button, startGame() is called
  2. when the user clicks on the i_th image,      selectFigure(i) is called
}

//-----
//
// Function: getRandom
// Description: Selects a random number (integer) between 0 and max - 1
// Inputs: max: a number
// Output: a random number between 0 and max - 1
//
function getRandom(max) { details omitted; they are not necessary for your work }

//-----
//
// Function: swapFigure
// Description: swap two picture pieces
// Inputs:
// p1: A number, index of the first picture piece to swap
// p2: A number, index of the second picture piece to swap
// Outputs: none
//
function swapFigure(p1, p2) {
  details omitted; we will discuss some of the details in class }

//-----
//
// Function: startGame
// Description: This is the entry point of a new game. It is invoked when the
// user clicks the "New Game" button. This function swaps pieces of original
// picture several times.
// Inputs: none
// Outputs: none
//
function startGame() {
  var count;          // counter for the for loop
  var randomPiece1;  // variable to hold a number representing a piece of pic.
  var randomPiece2;  // variable to hold another number representing a piece of pic
```

```

// swap pairs of image pieces several times to achieve a random initialization effect
for (count=0; count <4 * totalPieces; count++) {

// details omitted: CAN YOU FILL THEM IN???

}
}

//-----
//
// Function: selectFigure
// Description: Invoked when user clicks on a piece of picture on the
// screen (to do this, just move your mouse over a piece and left-click it).
// If the user has just selected two pieces, this function swaps the pieces.
// Otherwise, it saves information about the selection and gives control back
// to the user.
// Inputs:
// pos: A number, the original position for the piece the user has selected (clicked)
// Outputs: none
//
function selectFigure(pos) {

    details omitted: we will work on filling in some of these details

}

</script>
</head>

//-----
<body scroll=true>
<h2>Slide Puzzle Game</h2>
<form>
<table>
<tr>
<td><input type=button name="confirmButton" value="Confirm" onClick='initialize()'/></td>
</tr>
</table>
</form>
</body>
</html>

```