

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <meta charset="utf-8">
5 <title>Number Guessing Game with Graphics</title>
6
7 <style type="text/css">
8
9 #stage
10 {
11     width: 300px;
12     height: 33px;
13     position: relative;
14 }
15
16 #scale
17 {
18     width: 300px;
19     height: 33px;
20     position: absolute;
21     top: 0px;
22     left: 0px;
23     background-image: url(images/scale.png);
24 }
25
26 #arrow
27 {
28     width: 17px;
29     height: 22px;
30     position: absolute;
31     top: 0px;
32     left: 0px;
33     background-image: url(images/arrow.png);
34
35     /*Transition*/
36     -webkit-transition: left 0.5s ease-out 0s;
37     -moz-transition: left 0.5s ease-out 0s;
38     transition: left 0.5s ease-out 0s;
39 }
40
41 </style>
42
43 <div id="stage">
44     <div id="scale"></div>
45     <div id="arrow"></div>
```

```
46 </div>
47
48 <p id="output">I am thinking of a number between 0 and 99.</p>
49 <input id="input" type="text" placeholder="Enter your guess...">
50 <button>GUESS</button>
51
52 <script type="text/javascript">
53
54 //Game variables
55 var mysteryNumber = 50;
56 var playersGuess = 0;
57 var guessesRemaining = 10;
58 var guessesMade = 0;
59 var gameState = "";
60 var gameWon = false;
61
62 //The input and output fields
63 var input = document.querySelector("#input");
64 var output = document.querySelector("#output");
65
66 //The button
67 var button = document.querySelector("button");
68 button.style.cursor = "pointer";
69 button.addEventListener("click", clickHandler, false);
70
71 //The arrow
72 var arrow = document.querySelector("#arrow");
73
74 function render()
75 {
76     //Position the arrow
77     //Multiply the players guess by 3 to get the
78     //current pixel position on the scale
79     arrow.style.left = playersGuess * 3 + "px";
80 }
81
82 function clickHandler()
83 {
84     playGame();
85 }
86
87 function playGame()
88 {
89     guessesRemaining = guessesRemaining - 1;
90     guessesMade = guessesMade + 1;
```

```
91  gameState = " Guess: " + guessesMade + ", Remaining: " + guessesRemaining;
92
93  playersGuess = parseInt(input.value);
94
95  if(playersGuess > mysteryNumber)
96  {
97      output.innerHTML = "That's too high." + gameState;
98
99      //Check for the end of the game
100     if (guessesRemaining < 1)
101     {
102         endGame();
103     }
104 }
105 else if(playersGuess < mysteryNumber)
106 {
107     output.innerHTML = "That's too low." + gameState;
108
109     //Check for the end of the game
110     if (guessesRemaining < 1)
111     {
112         endGame();
113     }
114 }
115 else if(playersGuess === mysteryNumber)
116 {
117     gameWon = true;
118     endGame();
119 }
120
121 //Update the graphic display
122 render();
123 }
124
125 function endGame()
126 {
127     if (gameWon)
128     {
129         output.innerHTML
130             = "Yes, it's " + mysteryNumber + "!" + "<br>"
131             + "It only took you " + guessesMade + " guesses.";
132     }
133     else
134     {
135         output.innerHTML
```

```
136         = "No more guesses left!" + "<br>"
137         + "The number was: " + mysteryNumber + ".";
138     }
139 }
140 </script>
141 </head>
142 <body>
143 </body>
144 </html>
```