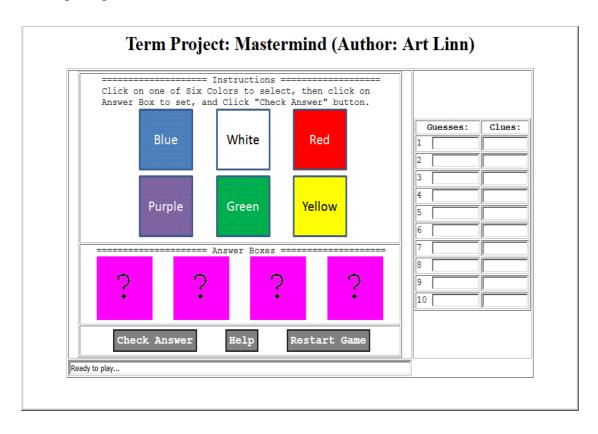
Term Project Specifications.

We will be building the game of Mastermind using Javascripting. Here is the opening web window:



Details about the term project:

Create an HTML w/JS file that performs the following:

Window Title: Term Project - Plays Mastermind

Examine the resource: TermProject - Output Window Sample

Run Mastermind.exe to see how game should perform.

DO:

Create an external "is" file which the HTML file would include. It needs to:

Ensure each function has at least one comment describing what's happening.

Ensure the browser display's images. If not, warn user with informational message below.

Ensure you write a win or loss message in a status area at bottom of form.

Ensure you have a Help button which opens a new window and displays the

resource userhelp.htm (the window should have width=300 heigth=400 with scrollbars)

Ensure you use the resource's GIF files to display the six colors and the Answer box colors.

Ensure you check a previous guess - if matches current guess - tell user.

Ensure you have a Restart which restarts the game.

Ensure the win/loss messages are something like:

"You Lost. Your logic skills need practice. Keep playing game. Answer was "

Turn 1: "You won: WOW! You are lucky. Take me to Las Vegas when you go. Answer was "

Turn 2: "You won: Excellent! You are extremely lucky. Answer was "

Turn 3: "You won: Superior! You are very lucky. Answer was "

Turn 4: "You won: Extremely Good! Your logic skills are great. Answer was "

Turn 5: "You won: Very Good! Your logic skills are very good. Answer was "

Turn 6: "You won: Good! Your logic skills are good. Answer was "

Turn 7: "You won: Nicely Done! Your logic skills are developing very well. Answer was "

Turn 8: "You won: Smile! Your logic skills are doing well. Answer was "

Turn 9: "You won: Got it! Your logic skills are starting to show up. Answer was "

Turn 10: "You won: Right! Your logic skills are adequate. Answer was "

Ensure you display informational messages something like:

"Game Over. Must hit ReStart to start a new game!"

"All Answer Boxes must be filled with a Color prior to Check Answer."

"This browser doesn't support images. Page will not work properly. Upgrade your browser."

- 1) Variables and arrays that you need to keep track of game information.
- 2) The various functions required.

I created these functions: initialize, selected color, pastecolor, checkanswer, showwin, showloss, showhelp and optionally: newgame, savegame, and restoregame.

- 3) Need to use Math.random to pick the four colors.
- 4) In the pastecolor function need to put the correct color into the Answer Box.
- 5) In the check answer function need to set up the clues for that guess and show them to the viewer. If viewer won - show them the "won" "turn message" with the correct answer. If number of try's is 10, then show them the "lost" message with the correct answer.

See Sample HTML below - need to finish it up

1) Use a <FORM>.

- 2) Create 3 buttons: "Check Answer", "Help", "Restart Game".
- 3) In the form use a Table. A sample is at the end of this document.
- 4) Six Color images are used for the colors. Ensure each one has an onClick event pointing to selected color with a parameter for that particular color.
- 5) Four Color images are used for the answer boxes. Ensure each one has an onClick event pointing to pastecolor with a parameter for that particular answer box.
- 6) Use img to display the colors. The default one should be questionrectangle.gif The fully qualified name (URL) can be found in Canvas.
- 7) Required to use a cookie that holds the status of the game so that you know when game is over.
- 8) It took me about 20 hours develop this. And another 30 hours to add restore feature.

Optional (up to +10 extra credit points) for using localStorage and JSON to save and/or restore the game from previously not completing if closing the window.

```
Sample HTML:
<HTML>
<HEAD>
<TITLE>
Term Project - Plays Mastermind
</TITLE>
<BODY onload=???YourInitialize???();>
<FORM name="myForm" >
<style>
.button {
 color: black;
 padding: 5px 5px;
text-decoration: none;
 margin: 4px 2px;
 cursor: pointer;
 font-family: "Courier New";
 font-size: 120%;
 font-weight: bold;
 border-style: solid;
border-width: 2px;
border-color: black;
h1 {
 text-align: center;
</style>
<H1>Term Project - Mastermind (Author ????your name????)</H1>
<SCRIPT src="YourScriptFileName.js"></SCRIPT>
<FONT face="courier new" size="12">
>
 >
```

```
  
                = Instructions =
                                        =<BR>
    
  Click on one of Six Colors to select, then click on <BR>
    
  Answer Box to set, and Click "Check Answer" button. <BR>
   
                 = Answer Boxes ===
  <BR>&nbsp;&nbsp;&nbsp;
 < BR >
       
  <INPUT type="button" onClick="checkanswer();" name="check" value="Check Answer">
  <!-- other buttons here -->
 <b>Guesses:</b>
 <b>Clues:</b>
 1  <INPUT type=text size=10 name=Data1 readonly="readonly">
 <INPUT type=text size=10 name=Clue1 readonly="readonly">
 <!-- other tr td's here for each Data and Clue; 10 in all -->
<B><input type=text size=100 name=sInfo readonly="readonly"></B>
</FONT>
</FORM>
</BODY>
</HTML>
```