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1  <?php
2
3  // This program is a modified version of the previous card program.
4  // I wanted to be able to select a card from my hand each time to
5  // put the current upcard in my hand and put the card that previously
6  // was in my hand into the discard pile.
7
8  // wanted to create a handsize so we can change it with ease
9  // creating a string to print different values into the display
10 // of the submit button. At the beginning of the game I want to
11 // ask the user to deal then process a round.
12
13 $submitString = "Discard";
14 $handSize = 7;
15
16 // arrays to hold the cards in our hand, deck, and the discard pile.
17
18 $deck = array();
19 $hand = array();
20 $discardPile = array();
21
22 //get my values posted from the form. We are saving our arrays in hidden form fields
23 // then altering them each round
24 $handCard = $_POST['handCard'];
25 $upCard = $_POST['upCard'];
26 $deckState = $_POST['deckState'];
27 $handState = $_POST['handState'];
28 $discardState = $_POST['discardState'];
29
30
31 //process our gameround. If the currentRound is empty let's set up our game!
32
33 if(!isset($_POST['currentRound'])) {
34     $currentRound = 0;
35     $deck = LoadDeck();
36     $submitString = "New Deal";
37
38 //whoah the current round is not empty that means we have already dealt and are in
39 //gameplay let's process a round.
40 }else{
41     $hand = unserialize($handState);
42     $currentRound = $_POST['currentRound'];
43     $deck = unserialize($deckState);
44
45     // let's only process things if there are cards left in the deck
46     if(count($deck) > 0){
47         $aCard = PickACard($deck);
48         $deck = ReduceDeck($deck,$aCard);
49         $discardPile = unserialize($discardState);
50
51         // let's change this so the hand only gets populated when we deal the first round
52         if($currentRound == 0){
53             $i = 1;
54             while($i <= $handSize){
55                 $hCard = PickACard($deck);
56                 $deck = ReduceDeck($deck,$hCard);
57                 array_push($hand,$hCard);
58                 $i++;
59             }
60
61         }
62         if($currentRound > 0){
63
64 // if a handCard has been selected we need to exchange it with the upcard
65 // in the hand array then discard the handCard. Otherwise, we should

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66 // just be moving the upCard to the discard pile like the original design.
67 // we also have to look at the fact that the handCard is just a name of a card.
68 // and not an array of the card values like we have been working with!
69
70     if($handCard != ""){
71
72         $switchCard = getCardArray($handCard);
73
74         array_push($discardPile,$switchCard);
75         $hand = removeHandCard($hand,$handCard);
76         array_push($hand,unserialize($upCard));
77     }ELSE{
78         array_push($discardPile,unserialize($upCard));
79     }
80
81
82     }
83
84 }else{
85     $gameStatusMessage .= "YOU HAVE LOST!";
86     $discardPile = unserialize($discardState);
87 }
88     $currentRound = $currentRound + 1;
89 }
90
91 // this section of code is looping through each array and creating a string variable to
92 // print out it's contents
93 // which each time will print out the image of the associated card in the array.
94
95 // this is the printing of the hand below.
96 // let's associate a radio button array with it so the user can select
97 // which card they would like to exchange with the upcard.
98 // I will create a table to control how the cards and radio buttons print out
99
100 //let's change this so the hand doesn't print until the first round:
101
102 if($currentRound == 0){
103     $currentHand = "";
104 }else{
105     $currentHand .= "<table border=\"1\"><tr>";
106
107     for($x=0;$x < count($hand);$x++){
108         $thisCard = $hand[$x];
109         $currentHand .= "<td align=\"center\"><input type=\"radio\" id=\"".$thisCard[0].\" \"
110         name=\"handCard\" value=\"".$thisCard[0].\"><hr>";
111         $currentHand .= "<img width=\"100\" height=\"153\"
112         src=\"images/DeckOfCards/\".$thisCard[1].substr($thisCard[0],0,1).\".jpg\"></td>";
113     }
114     $currentHand .= "</tr></table>";
115 }
116
117 for($x=0;$x < count($deck);$x++){
118     $thisCard = $deck[$x];
119     if($x % 10 == 0){
120         $currentDeck .= "<br>";
121     }
122     $currentDeck .= "<img width=\"100\" height=\"153\"
123     src=\"images/DeckOfCards/\".$thisCard[1].substr($thisCard[0],0,1).\".jpg\">";
124 }
125
126 for($x=0;$x < count($discardPile);$x++){
127     $thisCard = $discardPile[$x];
128     if($x % 10 == 0){
129         $currentDiscardPile .= "<br>";

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129     }
130     $currentDiscardFile .= "<img width=\"100\" height=\"153\"
src=\"images/DeckOfCards/\".$thisCard[1].substr($thisCard[0],0,1).\".jpg\">";
131 }
132
133 // this displays the current upcard.  If it is a new game there is no upcard.
134
135 if($currentRound == 0 || count($deck) == 0){
136     $chosenCard = "";
137 }else{
138     $chosenCard .= "<img width=\"100\" height=\"153\"
src=\"images/DeckOfCards/\".$aCard[1].substr($aCard[0],0,1).\".jpg\">";
139     // $upCard = serialize($upCard);
140 }
141
142 // below are all my functions.
143
144 // a function to remove a card from the current hand
145 function removeHandCard($hand,$handCard){
146
147     for($x=0;$x < count($hand)-1; $x++){
148         if ($hand[$x][0] == $handCard){
149             array_splice($hand, $x, 1);
150         }
151     }
152
153     return $hand;
154 }
155 // a function to get the card array from the deck so we can work with it
156
157 function getCardArray($cardString){
158
159     //let's try and load a whole deck so we can pick out the card array we need
160     $myCard = array();
161
162     $wholeDeck = loadDeck();
163
164     for($x=1;$x < count($wholeDeck); $x++){
165
166         IF($wholeDeck[$x][0] == $cardString){
167
168             $myCard = $wholeDeck[$x];
169         }
170     }
171
172 }
173
174 return $myCard;
175
176 }
177
178 // a function that removes the current randomly chosen card from the deck.
179
180 function ReduceDeck($deck,$aCard){
181
182     $i = 0;
183     while($i < count($deck)){
184         if($deck[$i][0] == $aCard[0]){
185             $elementID = $i;
186         }
187         $i++;
188     }
189     array_splice($deck, $elementID, 1);
190     return $deck;
191 }
192
193 function PickACard($deck){

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194
195     $pickACard = Rand(0, count($deck)-1);
196     $card = $deck[$pickACard];
197     return $card;
198
199 }
200
201 // a function that creates a standard deck of 52 cards in an array.
202
203 function LoadDeck() {
204
205     $deck = array (
206         array("H2", 2, "Deuce"),
207         array("H3", 3, "Three"),
208         array("H4", 4, "Four"),
209         array("H5", 5, "Five"),
210         array("H6", 6, "Six"),
211         array("H7", 7, "Seven"),
212         array("H8", 8, "Eight"),
213         array("H9", 9, "Nine"),
214         array("H10", 10, "Ten"),
215         array("H11", 11, "Jack"),
216         array("H12", 12, "Queen"),
217         array("H13", 13, "King"),
218         array("H14", 14, "Ace"),
219         array("D2", 2, "Deuce"),
220         array("D3", 3, "Three"),
221         array("D4", 4, "Four"),
222         array("D5", 5, "Five"),
223         array("D6", 6, "Six"),
224         array("D7", 7, "Seven"),
225         array("D8", 8, "Eight"),
226         array("D9", 9, "Nine"),
227         array("D10", 10, "Ten"),
228         array("D11", 11, "Jack"),
229         array("D12", 12, "Queen"),
230         array("D13", 13, "King"),
231         array("D14", 14, "Ace"),
232         array("C2", 2, "Deuce"),
233         array("C3", 3, "Three"),
234         array("C4", 4, "Four"),
235         array("C5", 5, "Five"),
236         array("C6", 6, "Six"),
237         array("C7", 7, "Seven"),
238         array("C8", 8, "Eight"),
239         array("C9", 9, "Nine"),
240         array("C10", 10, "Ten"),
241         array("C11", 11, "Jack"),
242         array("C12", 12, "Queen"),
243         array("C13", 13, "King"),
244         array("C14", 14, "Ace"),
245         array("S2", 2, "Deuce"),
246         array("S3", 3, "Three"),
247         array("S4", 4, "Four"),
248         array("S5", 5, "Five"),
249         array("S6", 6, "Six"),
250         array("S7", 7, "Seven"),
251         array("S8", 8, "Eight"),
252         array("S9", 9, "Nine"),
253         array("S10", 10, "Ten"),
254         array("S11", 11, "Jack"),
255         array("S12", 12, "Queen"),
256         array("S13", 13, "King"),
257         array("S14", 14, "Ace"),
258     );
259
260     return $deck;

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261
262 }
263
264 //now it's time to print our page!
265 ?>
266
267 <!DOCTYPE html>
268 <html>
269 <head>
270     <title>Deck Of Cards</title>
271 </head>
272     <body>
273         <table width="100%">
274             <tr>
275                 <td align="center">
276                     <table width="500px"><tr><td>
277                         Now I am going to print a radio button array with the hand so the
278                         user
279                         can select a card from their hand if they want to exchange it with
280                         the upcard.
281                         I will then put the card from their hand into the discard array,
282                         delete the
283                         card from their hand then move the upcard into the hand. Wow! A
284                         lot of
285                         fiddling around with this thing to figure out how to get it all to
286                         work
287                         the way I want. Welcome to the world of software engineering!
288
289                     </td></tr></table>
290                     <form action="" name="postrroller" method="post">
291                         <table>
292                             <input type="hidden" name="currentRound" value="<?PHP
293                                 echo $currentRound; ?>">
294                             <input type="hidden" name="handState" value="<?PHP
295                                 echo htmlentities(serialize($hand)); ?>">
296                             <input type="hidden" name="upCard" value="<?PHP echo
297                                 htmlentities(serialize($aCard)); ?>">
298                             <input type="hidden" name="deckState" value="<?PHP
299                                 echo htmlentities(serialize($deck)); ?>">
300                             <input type="hidden" name="discardState" value="<?PHP
301                                 echo htmlentities(serialize($discardPile)); ?>">
302                             <tr><td><input type="submit" value="<?PHP echo
303                                 $submitButtonString; ?>"></td></tr>
304                         </table>
305
306                     <table border="1">
307                         <tr><td align="center">It is Currently Round: <?PHP echo
308                             $currentRound; ?></td></tr>
309                         <tr><td align="center"><?PHP echo $gameStatusMessage;
310                             ?></td></tr>
311                         <tr><td align="center"><?PHP echo $chosenCard; ?></td></tr>
312                         <tr><td align="center">Current Hand: <?PHP echo
313                             count($hand); ?></td></tr>
314                         <tr><td align="center"><?PHP echo $currentHand; ?></td></tr>
315                         <tr><td align="center">Cards Remaining In The Deck: <?PHP
316                             echo count($deck); ?></td></tr>
317                         <tr><td align="center"><?PHP echo $currentDeck; ?></td></tr>
318                         <tr><td align="center">Current Discard Pile: <?PHP echo
319                             count($discardPile); ?></td></tr>
320                         <tr><td align="center"><?PHP echo $currentDiscardPile;
321                             ?></td></tr>
322                     </table>
323
324                     </form>
325
326                 </td>
327             </tr>
328         </table>
329     </body>

```

