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**Class: CS3270**

**HW 5 Report Responses**

2. a.    **What are the names of the identifying player-colors (used in front of the player-names)?** G.gif, P.gif, R.gif, Y.gif

**i.**        **Where are these located in your image directory file-structure?**

images

**b.**    **What are the names of the matching shrimp pieces?**

sG.gif, sP.gif, sR.gif, sY.gif

**i.**        **In which two (or more) regions of the basic wireframe will these be used?**

They will be used in the player�s stats and in their possessions, also on the game board.

**ii.**        **Where are these located in your image directory file-structure?**

game/reef/images

**c.**    **What are the names of the larva-cube icons?**

l0, l1, l2, l3, l4

**i.**        **In which two (or more) regions of the basic wireframe will these be used?**

They are shown in the players Initial larva cubes and in the players possessions.

**ii.**        **Where are these located in your image directory file-structure?**

game/reef/images

**d.**    **What are the names of the polyp-tile (what I called *"coral"*) graphic files?**

**�**p0, p1, p2, p3, p4

**i.**        **In which five (or more) regions of the basic wireframe will these graphics be used?**

In the Cosumed polyp tiles(in the players stats), In the players possessions, inside the parrotfish, in the hierarchy squares, inside the resource squares, and also on the game board.

**ii.**        **Where are these located in your image directory file-structure?**

game/reef/images

**e.**    **How are the twenty *Dominance-tile* (official name: "coral-tiles",� unfortunately!) graphic files implemented?**

They are dynamic and contain the image of each 3 polyp tiles inside them. They switch when told to do so.

**i.**        **What graphics resources are used?**

They used 4 images per dominance tile.

**ii.**        **Where are these located in your image directory file-structure?**

game/reef/images

**f.**     **What are the names of the "alga cylinder" graphics?**

cyb, cyg,cyp,cyr

**i.**        **Where are these located in your image directory file-structure?**

**�**game/reef/images

**g.**    **What are the names of *all four* reef images?**

b0, b1, b2, b3

**i.**        **Which two are you using in your implementation?**

b0, b3

**ii.**        **Where are these located in your image directory file-structure?**

game/reef/images

**h.**    **Does this directory file-structure for your images make sense to you?� How would you prefer to structure your image resources?**

I would put all the images into one image folder, also not have so many subfolders within a folder, just one folder that contains them all.

**i.**        **Would you change that file-structure if it were up to you?� Explain. This would be the time to do it -- it will only get harder the further you get into the process.� This is one of the many reasons there is a Design Phase before the Implementation Phase.**

**Note, however, that if you *do* decide to change the file structure, you will no longer be able to pattern your PHP code after the HTML code delivered to you by the SBW server.� It would definitely be easier to leave it as it currently is, no matter how personally aesthetically displeasing.**

**�����������**I would like to do it if it wasn�t hardcoded already, if I implemented this game originally that is what I would�ve done. Due to the fact it is already done this way I will leave it be.

**ii.**        **Provide your final design-decision regarding the graphics files directory structure, and your rationale.**

3. **a.**    **How many of each color of the following resources does the game have?**

**i.**        **Larva cubes**- 50

**ii.**        **Polyp tiles**- 200

**iii.**        **Shrimp pieces**- 16

**iv.**        **Officially-named "Coral tiles"**– 10

4. **a.**    **Given the naming-structure of the various colors of the polyp tiles and larva cubes, what kind of data structure does this suggest to you in order to most-conveniently manage these resources when PHP is printing out the code representing them?**

Since they are labeled 0,1,2,3,4 essentially it would be easy to put them into an array where possible to keep trach of them easily.

**i.**        **Does this suggest any functions we might eventually want to implement?� What might their names (and functionality) be?**

Eventually we will have to store these larva cubes and polyp tiles in many places. Including the player�s stats as well as possessions, the game board and so on. Using arrays would be an efficient way to do so, since the images values correspond to a location within the array essentially.

**b.**    **How might you plan to represent a player's current hand of 10 polyp tiles (3W 1Y 2O 2P 2G), for example?**

Well if put into an array simply put 3 in the 0 slot and 1 in the 1 slot and 2 in the 2 slot and so on. Since the tiles are numbered in that fashion you can have the numbers in that array to display how many of each the player has.

**c.**    **How might you plan to represent a player's current hand of 6 *consumed polyp tiles* (1W 3P 2G)?**

Essentially I would represent it the same way as the poly tiles in hand, as they are consumed they will be place in their corresponding slot in the array.

**d.**    **How might you plan to represent a player's current hand of 4 Larva Cubes (1Y 1O 2G)?**

I believe an array will work here also with the above explanations.

**e.**    **How might you represent the game's initial supply of 200 polyp tiles, from which each player received a random subset at the beginning of the game?**

I would assume that there are 40 of each polyp tile at the beginning of the game, I would have an array that holds the value 40 in each corresponding slot, pop a given value from each slot at random until the player is given that amount of polyp tiles.

**i.**        **Provide a detailed pseudocode (or a PHP function implementation) of this initial supply being initialized, and then six of these being assigned to the first player (in a 2-player game)**

For i in recourceArray:

����������� resourceArray.takeOutRandom(i)

����������� until playerArray.vals(i) = 6

5. **Locate the code implementing the initial board-state (two reefs each containing one of each color of polyp-tile in hard-coded locations).**

**a.**    **How many lines of code does this require in your HTML source file?**

It requires 45 lines of code.

**b.**    **Explain how the letters and numbers are placed that index each location on the reefs**

They are placed in span tags with defined locations such as left, top, width, height, z-index.

**c.**    **How would you initialize the data structure that provides this initial state of the game?**

To place objects on the game board I would create a 2-D array over each game board, much like the table we created in lab a few weeks back, and have every slot have a given name that can be accessed.

**d.**    **How would you process this data structure in order to generate the code that correctly displays this initial state?� Provide a detailed pseudocode (or PHP function implementation) of this process.**

Create a 2-D array with given values such as A-2.

Place one of each polyp-tile on each game board in a random location.

Echo out the image in the given location.