Unit 5 Lesson 2 Section 3- Answers- Outfit Picker

Lines 1-2: Why does this program use two lists? What is each one storing? This app needs a list for the tops and the bottoms so the user can scroll between them.

Lines 4-5: Why does this program include the variables `topsIndex` and `bottomsIndex`? What would happen if these variables were removed from the program? This variable is keeping track of which top and bottom the user is looking at. If these variables were not stored it would be impossible to create the scrolling behavior used in the app.

Lines 10-15: Write a short description of what this event handler does. This event handler scrolls the tops to the left. First it checks that the index is not at zero already, the lowest possible index. If it's above zero it decreases it by one and then updates the screen to show the new outfit to the left.

Line 18: What is the conditional statement `topsIndex < topsList.length - 1` checking? What would break if it was instead `topsIndex < topsList.length`? This if-statement is making sure the topsIndex doesn't go off the end of the list, creating an error. If the if-statement were changed then it would be possible to increase the index one beyond the end of the list, creating an error.

Lines 38-43: Find all the places that the `updateScreen` function is called. What changes about the way the app runs if any of these calls were removed? This function is called after the app is started and inside each event handler. If it were not included in any of these places then either the clothes would not show up when the app was started or the outfit would not appear to change when the different buttons were clicked

Unit 5 Lesson 2 Section 4- Answers- Band Namer

Lines 1-2: Why are there two lists in this app instead of 1? This app needs one list for the nouns and one for the adjectives. It might technically be possible to use a single list but it would be very complicated.

Lines 4-5: Why is "Sideways Monkeys" always the first band name shown? These lines of code set the two different indexes to 0 to start and "Sideways" and "Monkeys" are the first values in the adjective and noun lists.

Line 10: What would break if this line read `randomNumber(0,nounList.length)` instead of `randomNumber(0,nounList.length-1)`? Sometimes the app would pick a number that is equal to `list.length` which is off the edge of the list. This is a good one to demonstrate to the class.

Lines 17-20: Write a short description of what each line in this function is doing. Line 17 takes the adjective at the current adjective index. Line 18 grabs the noun at the current noun index. Line 19 create a string that combines these two words and line 20 puts them on the screen

Unit 5 Lesson 2 Section 6- Answers- Pair Maker

Line 6: What does `.join()` do? Why is it necessary for this app to run? `.join()` takes a list and turns it into a string, connecting the different elements using whatever connector string it's given. This is the only way to take the list and turn it into something that can be assigned to an element.

Line 7: This line of code references an `"options"` property of a dropdown. Go look at what that property does in Design Mode. Then write a short description of what this line of code does. This line of code is assigning a list to a dropdown

Lines 18-19: This line of code references an `"index"` property of a dropdown. Go look at what that property does in Design Mode. Then describe how these lines of code work together to remove a user from the list of partners? The index property keeps track of which option in the dropdown is currently shown. These lines of code let the user select the current user and then removes it from the list of people. Then the screen is updated with the user removed.

Line 24: Why does this conditional read `peopleList.length >= 2`? What would break if it read `peopleList.length >= 1` instead? This is checking that there are at least two people in the list to make a pair. With the change suggested you might try to make a pair when there's only one person in the list, causing an error when trying to find a second partner.

Line 26 - 27: What would happen if you switched the order of these two lines of code? Switching these lines of code would mean that the person was removed from the list before their name was picked. This means that a different person would actually be removed from the list than displayed on the screen. This is a good one to actually try out in class.