Requirements:

The script that I'm going to make must do the following:

- On the Other Puzzles page, allow the user to select a sort from a drop-down menu. The options are:
 - o Alphabetical order
 - o Difficulty
 - o Rating
- On the Other Puzzles page, allow the user to select categories using a check-box system. Display the selected ones, don't show the unselected ones. The categories are:
 - o Cuboid
 - o Shape-shifting
 - o Rubik's Cube Design
 - o Other
- On the Special Patterns page, allow the user to select a sort from a drop-down menu. The options are:
 - o Alphabetical order
 - Difficulty

Design:

Classes: None

Functions:

- sorter() Sorts the item table according to the option chosen by the user
 - sortKind() Holds different functions to be used in the system 'sort()' function, one function for each sort option.
- **filter()** Filters out or includes items according to the categories that the user checked the checkboxes of.

Variables:

• in sorter():

- o selected Selected index of the drop-down menu, retrieved from the DOM
- sortKind Holds the function to be used in the system 'sort()' function, which sorts an array.

in sortKind functions:

• **t1, t2** - Arguments in the sortKind comparison function. They are 2 row sets from trhold chosen by the sort() function.

• in "title" case:

 n1, n2 - Hold the innerHTML from the first cell () of the first row of t1 and t2. They hold the titles of the items.

• in "difficulty" case:

- o **t[2]** Holds an array of t1 and t2, so they can be used in a loop so the same statements can be used on both of them.
- dif[2] To hold the difficulty rating of the arguments being compared.
- n Holds the innerHTML from t1 and t2, but only one of them at a time. It then is sliced, trimmed, and made uniform to be used as a comparator.
- ts Stands for 'Temporary Storage', and is used to temporarily hold the results to be put in the dif[2] array.

• in "rating" case:

- o t[2] Same as in "difficulty" case
- o rating[2] Like dif, but holds the 'My Rating' rating instead of the difficulty rating.
- o **n** Same as in "difficulty" case
- o trcount Count of the rows () in the table
- o **trhold[trcount/2][2]** An array of all the rows, grouped into sets of 2, to separate the other puzzle items.
- o **newversion** To hold all of the HTML for the rows but in the new order, to overwrite the current document order.

• in filter():

- o sCuboid Holds the checked status of the Cuboid checkbox
- sShape Holds the checked status of the Shape Shifting checkbox
- o sDesign Holds the checked status of the Rubik Design checkbox
- o sOther Holds the checked status of the Other checkbox
- trcount Same as in sortfunc()
- trhold[trcount/2][2] Same as in sortfunc()
- o **n** Same as in 2 of the sortKind functions in the sorter function, except it holds only the last cell () from the trhold array.

• for loop variables:

- o i Used within the functions one level deep
- o ii Used within the sortKind functions two levels deep

Flow Chart:

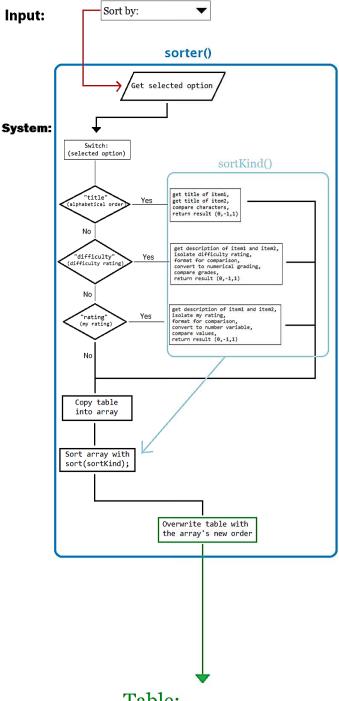
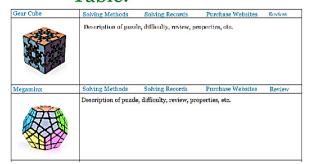


Table:

Output:



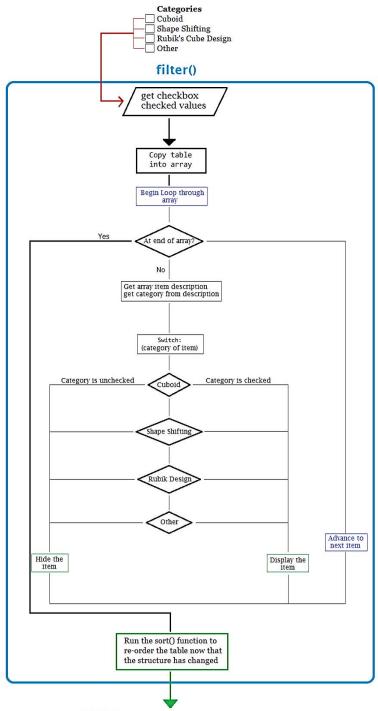


Table:

Gear Cube	Solving Methods	Solving Records	Purchase Websites	Review
	Description of puzz	le, difficulty, review, p	roperlies, ele.	
Megaminx	Solving Methods Description of puzzl	Solving Records e, difficulty, review, pr	Purchase Websites operties, etc.	Review