

HW 4 React report

MANUFACTURER	MODEL	YEAR	STOCK	PRICE	OPTION
Toyota	Rav4	2008	3	\$8500.00	<input type="button" value="Increment"/>
Toyota	Camry	2009	2	\$6500.00	<input type="button" value="Increment"/>
Toyota	Tacoma	2016	1	\$22000.00	<input type="button" value="Increment"/>
BMW	i3	2012	5	\$12000.00	<input type="button" value="Increment"/>
Chevy	Malibu	2015	2	\$10000.00	<input type="button" value="Increment"/>
Honda	Accord	2013	1	\$9000.00	<input type="button" value="Increment"/>
Hyundai	Elantra	2013	2	\$7000.00	<input type="button" value="Increment"/>
Chevy	Cruze	2012	2	\$5500.00	<input type="button" value="Increment"/>
Dodge	Charger	2013	2	\$16000.00	<input type="button" value="Increment"/>
Ford	Mustang	2009	1	\$8000.00	<input type="button" value="Increment"/>

After running the .html file this will be how the initial table will look like. Every car from the list will be printed out with the increment button on each row of the car. The price format is also according to the specs of the assignment.

MANUFACTURER	MODEL	YEAR	STOCK	PRICE	OPTION
Toyota	Rav4	2008	3	\$8500.00	<input type="button" value="Increment"/>
Toyota	Camry	2009	2	\$6500.00	<input type="button" value="Increment"/>
Ford	Mustang	2009	1	\$8000.00	<input type="button" value="Increment"/>
BMW	i3	2012	5	\$12000.00	<input type="button" value="Increment"/>
Chevy	Cruze	2012	2	\$5500.00	<input type="button" value="Increment"/>
Honda	Accord	2013	1	\$9000.00	<input type="button" value="Increment"/>
Hyundai	Elantra	2013	2	\$7000.00	<input type="button" value="Increment"/>
Dodge	Charger	2013	2	\$16000.00	<input type="button" value="Increment"/>
Chevy	Malibu	2015	2	\$10000.00	<input type="button" value="Increment"/>
Toyota	Tacoma	2016	1	\$22000.00	<input type="button" value="Increment"/>

After clicking on the year heading, the cars will be sorted according to the year. For the initial click it will be sorted in an ascending order.

MANUFACTURER	MODEL	YEAR	STOCK	PRICE	OPTION
Toyota	Tacoma	2016	1	\$22000.00	<input type="button" value="Increment"/>
Chevy	Malibu	2015	2	\$10000.00	<input type="button" value="Increment"/>
Honda	Accord	2013	1	\$9000.00	<input type="button" value="Increment"/>
Hyundai	Elantra	2013	2	\$7000.00	<input type="button" value="Increment"/>
Dodge	Charger	2013	2	\$16000.00	<input type="button" value="Increment"/>
BMW	i3	2012	5	\$12000.00	<input type="button" value="Increment"/>
Chevy	Cruze	2012	2	\$5500.00	<input type="button" value="Increment"/>
Toyota	Camry	2009	2	\$6500.00	<input type="button" value="Increment"/>
Ford	Mustang	2009	1	\$8000.00	<input type="button" value="Increment"/>
Toyota	Rav4	2008	3	\$8500.00	<input type="button" value="Increment"/>

After clicking the second time on the year header it sorts the cars array objects in a descending order.

MANUFACTURER	MODEL	YEAR	STOCK	PRICE	OPTION
Toyota	Tacoma	2016	1	\$22000.00	<input type="button" value="Increment"/>
Chevy	Malibu	2015	2	\$10000.00	<input type="button" value="Increment"/>
Honda	Accord	2013	1	\$9000.00	<input type="button" value="Increment"/>
Hyundai	Elantra	2013	2	\$7000.00	<input type="button" value="Increment"/>
Dodge	Charger	2013	2	\$16000.00	<input type="button" value="Increment"/>
BMW	i3	2012	5	\$12000.00	<input type="button" value="Increment"/>
Chevy	Cruze	2012	2	\$5500.00	<input type="button" value="Increment"/>
Toyota	Camry	2009	2	\$6500.00	<input type="button" value="Increment"/>
Ford	Mustang	2009	4	\$8000.00	<input type="button" value="Increment"/>
Toyota	Rav4	2008	3	\$8500.00	<input type="button" value="Increment"/>

After clicking the Ford Mustang 2009 increment button for 3 times the stock has increase to 4.

MANUFACTURER	MODEL	YEAR	STOCK	PRICE	OPTION
Toyota	Rav4	2008	3	\$8500.00	<input type="button" value="Increment"/>
Toyota	Camry	2009	2	\$6500.00	<input type="button" value="Increment"/>
Ford	Mustang	2009	4	\$8000.00	<input type="button" value="Increment"/>
BMW	i3	2012	5	\$12000.00	<input type="button" value="Increment"/>
Chevy	Cruze	2012	2	\$5500.00	<input type="button" value="Increment"/>
Honda	Accord	2013	1	\$9000.00	<input type="button" value="Increment"/>
Hyundai	Elantra	2013	2	\$7000.00	<input type="button" value="Increment"/>
Dodge	Charger	2013	2	\$16000.00	<input type="button" value="Increment"/>
Chevy	Malibu	2015	2	\$10000.00	<input type="button" value="Increment"/>
Toyota	Tacoma	2016	1	\$22000.00	<input type="button" value="Increment"/>

Even after resorting it to ascending order the stock of the Ford Mustang 2009 still has the correct amount of stock, which is 4.

So how did I solve this assignment. This assignment was not really that hard.

Generating the table

First, I generated the table using the map function and deconstructed the object using the key value. The map function also has an iterative function where it is able to iterate through the whole nested state. After being able to construct the state values I simply add in the increment button to a new row. To generate the header of the table I simply took the first object key values and print it out. To make sure that the year has a onClick function, add a Boolean and check if the key value is year then make it to a clickable header.

Making the stock increment

I simply add another attribute to the button where it stores the object array index. Then in my onClick function, I simple just retrieve the index value of the button and then use the setState(). Because this is a nested state, I had to create a new car state. Update the new cars state and then set the new car state.

Sorting by year

With the same method as previous. I simple created a new cars state and then sort it in ascending order. I sort it by using the state key value and using the sort() function where I compare two objects. To keep track of it I simply added another state which is Boolean state to tell me if it has been sorted in ascending or descending order.