

Front End Engineering Challenge

Requirements:

Implement an editable table with the following columns to display continuous tier ranges. The editable table should have capabilities to add a new row and update an exiting row.

- Tier Name (String)
- Min. Qty. (Number)
- Max. Qty. (Number)
- Actions (Icon) - Edit / Save

Tech Stack:

- Knockout
- Oracle JET
- React
- Angular
- Vue
- HTML5
- CSS3
- JavaScript / TypeScript

Also, submit a video of the application explaining your thought process in solving this problem.

Example:

0. Initial State:

[Add Tier](#)



Tier Name	Min. Qty.	Max. Qty	Actions
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1. Action = ADD, min = 1, max = 99

After Edit:

Tier Name	Min. Qty.	Max. Qty	Actions
1-99 Units	1	99	✓


After Save:

Tier Name	Min. Qty.	Max. Qty	Actions
1-99 Units	1	99	
100+ Units	100		




Note that an additional tier is created with $(99+1=100)+$ units. This is a special case when the table is initially empty.

2. Action = UPDATE, min = 1, max = 99

After Edit:

Tier Name	Min. Qty.	Max. Qty	Actions
1-24 Units	1	24	✓
100+ Units	100		



After Save:

Tier Name	Min. Qty.	Max. Qty	Actions
1-24 Units	1	24	
25-99 Units	25	99	
100+ Units	100		


Note that a new tier $(24+1=25)-(100-1=99)$ is created.



3. Action = UPDATE, min = 1, max = 24

After Edit:

Tier Name	Min. Qty.	Max. Qty	Actions
1-49 Units	1	49	✓
25-99 Units	25	99	
100+ Units	100		

After Save:


Tier Name	Min. Qty.	Max. Qty	Actions
1-49 Units	1	49	

Tier Name	Min. Qty.	Max. Qty	Actions
50-99 Units	50	99	
100+ Units	100		




Note that the tier range from 25-99 is now adjusted to (49+1=50)-99.

4. Action = UPDATE, min = 50, max = 99

After Edit:

Tier Name	Min. Qty.	Max. Qty	Actions
1-49 Units	1	49	
30-99 Units	30	99	✓
100+ Units	100		



After Save:

Tier Name	Min. Qty.	Max. Qty	Actions
1-29 Units	1	29	
30-99 Units	30	99	
100+ Units	100		


Note that the tier range from 1-49 is now adjusted to 1-(30-1=29).




5. Action = UPDATE, min = 30, max = 99

After Edit:

Tier Name	Min. Qty.	Max. Qty	Actions
1-29 Units	1	29	
60-99 Units	60	99	✓
100+ Units	100		

After Save:




Tier Name	Min. Qty.	Max. Qty	Actions
1-29 Units	1	29	

Tier Name	Min. Qty.	Max. Qty	Actions
30-59 Units	30	59	
60-99 Units	60	99	
100+ Units	100		



Note that a new tier from $(29+1=30)-(60-1=59)$ is created.

6. Action = UPDATE, min = 1, max = 29

After Edit:

Tier Name	Min. Qty.	Max. Qty	Actions
1-199 Units	1	199	✓
30-59 Units	30	59	
60-99 Units	60	99	
100+ Units	100		

After Save:

Tier Name	Min. Qty.	Max. Qty	Actions
1-199 Units	1	199	
200+ Units	200		

Note that all tiers after 199 units have been removed and a new tier from $(199+1=200)+$ units has been created.