

Problem

Design a calendar display widget using your favourite Front-end language and framework. Calendar has an events list, each event has the following properties.

- scheduleEndDate : Date
- scheduleDate: Date
- scheduleStartDate: Date
- reservationId: Integer
- orgId: Integer
- startSlot: Integer
- endSlot: Integer
- employeeIds: Integer[]
- taskId: Integer
- audioRequired: boolean
- subject: String
- description : String
- location : String






Each day is divided into 96 slots of 15 minutes each. Event can be spread across day ie. Starting at 9PM ie Start Slot = 84 IST and ending at 6.30AM next day ie. End Slot = 26




Bonus Points : Develop an API to list and insert new events and integrate it with the widget. Redraw the widget when a new day is selected or a new event is added for the selected day. (Hint : You can use hooks if you use reactjs)






Hint : This is a problem of overlapping intervals. You just have to find the right column to display the widget. Start slot is to be mapped to Row Number.

Send your assignment to : tushar@druta.io. If you are not able to solve certain cases, that's OK just mention the list of combinations your solution supports.

Below are possible combinations of events and how it should be drawn.

6:0				
6:30	Calculus			
7:0	<div>  6.30 on Tue Dec 08 2020 to 12.30 on Tue Dec 08 2020 Schedule Day - Tue Dec 08 2020 0/3 0#1337 </div>			
7:30				
8:0				
8:30				
9:0				
9:30		Calculus		
10:0		<div>  9.30 on Tue Dec 08 2020 to 12.30 on Tue Dec 08 2020 Schedule Day - Tue Dec 08 2020 0/1 tableColIndex = 1 #1338 </div>		
10:30				
11:0				
11:30				
12:0				
12:30			Calculus	Calculus
			<div>  12.30 on Tue Dec 08 2020 to 13.30 on Tue Dec 08 2020 Schedule Day - Tue Dec 08 2020 0/2 tableColIndex = 2 #1339 </div>	<div>  12.30 on Tue Dec 08 2020 to 14.30 on Tue Dec 08 2020 Schedule Day - Tue Dec 08 2020 0/1 tableColIndex = 3 #1340 </div>
13:0				Calculus
				<div>  12.30 on Tue Dec 08 2020 to 17.30 on Tue Dec 08 2020 Schedule Day - Tue Dec 08 2020 0/1 tableColIndex = 4 #1341 </div>
13:30				

17:30	Calculus		
18:0	<div>  <p>17.30 on Thu Dec 10 2020 to 21.30 on Thu Dec 10 2020</p> <p>Schedule Day - Thu Dec 10 2020</p> <p>0/1</p> <p>0#1356</p> </div>		
18:30			
19:0			
19:30		Calculus	
20:0		<div>  <p>19.30 on Thu Dec 10 2020 to 21.30 on Thu Dec 10 2020</p> <p>Schedule Day - Thu Dec 10 2020</p> <p>0/1</p> <p>tableColIndex = 1</p> <p>#1357</p> </div>	
20:30			Calculus
21:0			<div>  <p>20.30 on Thu Dec 10 2020 to 21.30 on Thu Dec 10 2020</p> <p>Schedule Day - Thu Dec 10 2020</p> <p>0/1</p> <p>tableColIndex = 2</p> <p>#1358</p> </div>
21:30			

6:30	Calculus			
7:0	<div><p>6.30 on Thu Dec 10 2020 to 12.30 on Thu Dec 10 2020 Schedule Day - Thu Dec 10 2020 0/3 0#1351</p></div>			
7:30				
8:0				
8:30				
9:0				
9:30		<div><div>Calculus</div><div><p>9.30 on Thu Dec 10 2020 to 10.30 on Thu Dec 10 2020 Schedule Day - Thu Dec 10 2020 0/1 tableCollIndex = 1 #1352</p></div></div>	<div><div>Calculus</div><div><p>9.30 on Thu Dec 10 2020 to 12.30 on Thu Dec 10 2020 Schedule Day - Thu Dec 10 2020 0/1 tableCollIndex = 2 #1353</p></div></div>	
10:0				
10:30				
11:0				
11:30				
12:0				
12:30		<div><div>Calculus</div><div><p>12.30 on Thu Dec 10 2020 to 13.30 on Thu Dec 10 2020 Schedule Day - Thu Dec 10 2020 0/1 tableCollIndex = 1 #1354</p></div></div>		<div><div>Calculus</div><div><p>12.30 on Thu Dec 10 2020 to 17.30 on Thu Dec 10 2020 Schedule Day - Thu Dec 10 2020 0/1 tableCollIndex = 3 #1355</p></div></div>
13:0				
13:30				