Peek Timeslot CRUD App Take-Home Challenge

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Timeslot CRUD App Take-Home Challenge

At Peek, we build software for tour and activity operators to run their business! On our frontend team, we love Ember because the convention over configuration concepts it employs has served us well to scale our large SaaS platform, PeekPro. One essential feature to almost all of our operators on PeekPro is the back office calendar where they can go to schedule activities or view rental bookings and see how many of their guests are arriving in a given day, week, or month.

Problem Description

Your challenge here is to build an application where you can view and schedule timeslots. In our world, a `timeslot` is a bookable activity that occurs on a given day and time.

Level 1 Requirements

- Show a button or a link call to action (CTA) to schedule a new timeslot.

- Clicking on that CTA should open a form where you can "save" the timeslot details (i.e. "schedule" the timeslot).
- Display the timeslots that have been scheduled, sorted in an intuitive way. A good looking list view is just fine.

Level 2 Requirements

- All Level 1 requirements
- Include a mechanism to cancel a timeslot with an accompanying "canceled" state.
- Include a mechanism to update a timeslot that was scheduled.
- After completing these initial requirements, write at least 3 tests for the core functionality.

Level 3 Requirements

- All Level 1 requirements, but instead of a list view, display the timeslots that have been scheduled in a calendar day view to visualize the start and end of the timeslots for a given day.
  - Consider how it looks if timeslots are scheduled to be at the same time, or otherwise overlapping.
- After completing these initial requirements, write at least 3 tests for the core functionality.

Timeslot Details (All levels)

The key things a timeslot should involve include:

- An activity name (string)
- A date (YYYY-MM-DD format)
- A start time (hh:mm format)
- An end time (hh:mm format)
- Maximum number of guests (number)

Here's an example of what that data model would look like:

```
{
  activityName: 'Walking Tour',
  date: '2021-10-10',
  startTime: '11:00',
  endTime: '13:00',
  numMaxGuests: 10
}
```

These timeslots are not expected to persist, so don't worry about storing them in a database! **Focus on making the create and read pieces of this CRUD app a delightful user experience with clear, understandable code.**

Expected Time & Effort 

You should spend as much time as it takes to come out with a solution you're proud of before the deadline, but it shouldn't take more than 3-4 hours. Time management is key!

Project Expectations & Extras 

- **It's not required to use Ember**; use whatever framework you're most comfortable with that best demonstrates your JavaScript skills.
- You must have a mechanism to schedule new timeslots, as well as view the timeslots that have been scheduled.
- We want to leave it to you to get creative on how to represent these timeslots.
- **Please provide a public URL to the code and the end result**.

Extra Credit

- Get creative and include some elements that help us learn more about you!
- Write more tests!
- Include scheduling form validation. Some ideas:
  - Enforce that all properties are included
  - Don't allow the start time to be after the end time
  - Don't allow scheduling a timeslot in the past
  - Don't allow scheduling a timeslot to end past 11:59 PM
- Include a way to sort and/or filter timeslots by one or more of the data model properties.
- Build a timeslot randomizer that will prepopulate the timeslot form with random data.

If you need further guidance or have any questions, you can reach out to me at celia@peek.com.