Coding Challenge

Intro:

This challenge will give us an idea of your comfort level with HTML, CSS, JavaScript, React, and SQL. Don't hesitate to ask if you have questions or need clarification on something. Thanks again for giving us some of your time.

What you're building:

The basic idea is to create a UI that allows the end user to filter a "session search" with dynamic criteria that lets them look at a subset of sessions.

Should do:

- Please keep track of the time you spent building the app. You might want to break it down into things like "Time building custom select menu", etc. Use your discretion.
- When the "Search" button is clicked, have your front-end app generate what would be the SQL query.
- Match the styling provided in the mockup available here.
    - Note the mockup has three slides/screenshots, to give an example flow.
- Implement all features described in the "Functionality" section below.
- Bonus Points:
    - Make the "select" dropdown field look just like the mockup.
    - Implement some animations where appropriate to give some UI polish.

Don't do:

- Don't use a styling framework like Bootstrap or Material; we want to see your CSS skills.
    - *Exception:* You can pull in a framework for icons, like Font Awesome.
- Server-side rendering of the content is irrelevant to us for this challenge.
- UI doesn't need to focus on being responsive.
- Don't use any react components like react-select. We want to see your skills building UI components from scratch.

SQL table schema:

Table name: session
Columns: *id, user_email, user_first_name, user_last_name, screen_width, screen_height, visits, page_response, domain, path*

Functionality:

- Predicate field options should include:
    - User Email
    - Screen Width
    - Screen Height
    - # of Visits
    - First
    - Name
    - Last Name
    - Page Response time (ms)
    - Domain
    - Page Path
- The fields above are either strings or numeric. Be sure each field and it's available operators are compatible.

  Operators:
    1. For strings:
        a. equals
        b. contains
        c. starts with
        d. in list
    2. For integers:
        a. equals
        b. between
        c. greater than
        d. less than
        e. in list
- Clicking the "*X*" on an individual row should remove that single row from your criteria set.
- Clicking the "*X*" on the first row, when no other rows exist, should simply reset; in other words, there should always be one row on the screen.
- Clicking the blue "*And*" button should add another row.
- Clicking "*Reset*" should clear your search criteria.
- When the user submits a valid search, the resulting SQL generated should be displayed in the UI within the "Your Generated SQL Statement goes here:" section