Peanut Labs Interview Challenge - Survey Engine Design

**Peanut Labs Pre-screening Assignment: Survey Engine Design**

**The Goal -**The goal of this assignment is to test the following skills, which are essential for this role:

1. Ability to learn fast and adapt in a fast-paced, dynamic environment
2. Ability to architect modular and scalable solutions to challenging problems
3. Ability to understand specifications and execute against them with lightening speed
4. Ability to ***architect and write******object oriented code***that is fully extensible*.*

\*Note that the challenge here is not to “get it working.” The real challenge is to build this thing using polymorphism and object oriented code. Ofcourse it must also be functional.

**The Assignment:**

A very basic survey engine that runs solely in javascript / HTML. With the following properties:

1. Must be fully object oriented. A full hierarchy should be architected to enable maximum extensibility in the future. Note that this is the most important aspect of the assignment.**Polymorphism** is the word of the day.
2. It should not require any database or server side code.
3. State does not need to be maintained beyond a browser refresh
4. no user account is required
5. Survey must support 4 question types:
6. Radio button - composed of a question, and any number of options, selectable via a radio button
7. check box - multi-select options
8. drop down
9. open-ended. text input

* Each question consists of the actual question, and answer options (or in the case of a text input, the text field)

**The Final Product**

* final javascript and HTML code.
* you can include any 3rd party libraries, and you can use html5 features
* when deployed in the browser, it should enable the user to do the following:

1. Create a survey by adding an unlimited number of questions one after the other.
2. Once I’m done adding questions, I can take the survey, going through and answering all the questions one at a time. Validation must work for each question to ensure that I select an option where appropriate and do not leave the text input field empty
3. When I’ve answered the last question, The survey engine should display all the questions along with my responses for each one

**Deadline.**

You will have 48 hours to respond with valid, working code that fulfills all the requirements in order to be considered for this position.

**Successful completion.**

Once your assignment is completed, reply to my email or send it to [resumes@peanutlabs.com](mailto:resumes@peanutlabs.com).  Upon successful review, you will be flown to our offices in San Francisco for an in-person interview.