Project Title

Survey Builder

Project Description

Background

We have a number of projects which rely on getting data, quickly and easily from a user: it could be demographic information from someone answering a survey on the street; it could be performance data taken during exercise. Whatever, we've worked really hard to make it quick and easy for someone to answer a couple of questions and then get on with what they were doing. We're really big on privacy, and we make sure that our respondents are protected. We take data which is anonymous at source, and which only allows numeric, or choice data to be input. No free text input is allowed: there's a risk that someone might type in their name, or some other personal information. We structure the set of questions someone might answer like this: Questions expect numeric or choice answers. Sections are groups of questions. Surveys are groups of sections. Each question, section and survey in the database has a unique identifier (a UUID). This means that questions, sections and surveys can be re-used. It means that we can ask the same question, or set of questions (a section) in different surveys. It means that if we build the surveys correctly, we can cross-correlate people's answers. If we begin each survey with the same section about demographics (age, gender, cultural background, fuzzy location), we can start to be able to compare populations. Note: there are obvious challenges to doing this, but that responsibility rests with the survey designers and the data miners.

What we need

Currently, we construct a survey in the raw, using a database viewer. It is unbelievably tedious and time-consuming. And prone to error. We would like to be able to:

1: View surveys currently defined

1. list all the surveys currently defined, clicking through each to see its sections, and clicking through those to see the questions. Click a question to see its properties.
2. list all the sections currently defined. Click through as previous.
3. list all the questions currently defined. Click through as previous.

2: Create new surveys, sections and questions

1. Create a new question. Choose the question type from a list.
2. Create a new section. Add questions to the section from a list. Make the list searchable / filterable / orderable.
3. Create a new survey. Add sections to the survey from a list. Make the list searchable / filterable/ orderable.

3: Edit surveys, sections and questions Once we have defined a question, section or survey, it can't be changed, if it has answer data associated with it. All has to remain the same if we are to cross-correlate. If the question/ section/ survey has not yet been used – that is, there is no answer data associated with it, then the question/ section/ survey can be edited.

What we have

Currently, we have an REST API onto a database, which does the GETs, PUTs and POSTs. We will replicate this, for you to build on. We also have a mobile client, written in cross-platform Ionic, which displays the surveys and writes answers to the database.

Your task

We would like a web UI which will create, read, update and delete surveys, sections and questions for us, via the REST API. We would like to be able to authenticate a user to do this. We would like to run the application on Heroku.

Experience Areas

This project will allow members to gain and exercise knowledge and experience in the following areas:

- Javascript
- Node
- Express, Jade
- HTML, CSS
- REST APIs
- UI, UX

- Heroku PAAS

Possible costs

Licensing of any libararies. Free-tier server

Equipment or Accounts needed

None

Deliverables

See 'Your Project Deliverables'.