TEST ASSIGNMENT FOR CANDIDATES FOR A FULL-STACK DEVELOPER POSITION

Test assignment consists of 3 parts: Front end task, data structures and a backend task.

1. Frontend Task

Need to create an application to edit the list of Groups and Roles. Roles are combined into groups.

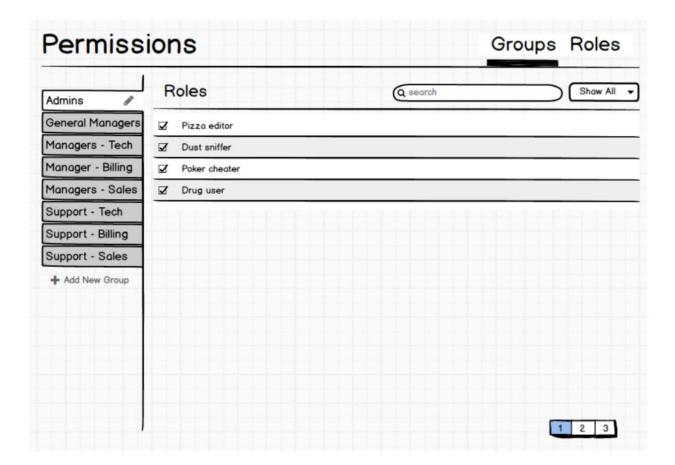
Group list:

- you can create a new group;
- you can edit the name of existing groups;

Form to edit the list of roles included in the group:

- list of all roles;
- ability to mark the roles required for the group;
- filter:
 - o display all roles, marked roles, filter by label;
 - o list search;
 - o page navigation (pagination).

The mockup shows an example of editing access groups. The interface for editing roles looks similar, only the left part contains a list of roles and the right part contains a list of access roles.



Recommendations

It is not necessary to implement the server part, it is enough to start-up the webpack dev server. You can store the data (access rights) can be stored in a JSON-file.

Technologies

Webpack (v2/3) - for building. The project must have a file describing how to start the project (readme.md).

Angular (v2/4) - for developing client-side logic. You can also use components.

UX

• Responsive (up to and including 320px in width).

CSS

- Do not use CSS framework;
- use BEM methodology for naming classes;
- use preprocessor (PostCSS);support latest versions of browsers;

2. Data structures

- Create a relational database model on the topic "Selling railroad tickets";
- How detailed the description of the subject area will be, you decide
- It is desirable to use MSSQL Server
- The result of the task can be a dump of the created database (*.bak file), *.dacpac schema description or SQL script that creates the database

3. Back-end Task (.Net app)

- Write a "proxy" that will return the modified text of reddit.com (or any other site of your choice);
- To each word, which consists of six letters, you must add a symbol "™";
- You can use any .Net technology and libraries in the C# language;
- The functionality of the original site must not be altered;
- All internal navigation links of the site must be replaced by the address of the proxy-server.

That is, site navigation must be handled by a Proxy without taking the client back to the original site.

Example. A request to, say, {proxy address}/r/popular/ should show the content of the page

https://www.reddit.com/r/popular/ with changed words that were 6 characters long.

And all the site navigation to sections of the site should go through Proxy.

Hint: There is no SLOC limit for your solution. But, if your proxy solution contains more than 300 SLOC, then probably you do something wrong.

Publishing the test task

The project must be published in a **private** repository on github.com or bitbucket.org.