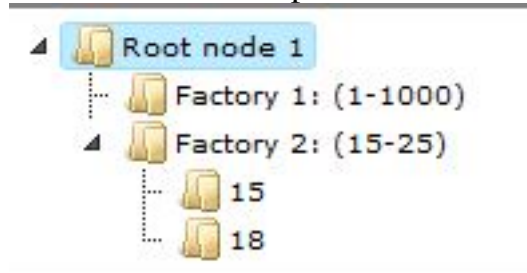Thank you for diving in! We look forward to evaluating your submission. This will be used to help you demonstrate your talent with various arenas: backend, networking, database and UI.

The Challenge

- Create a web UI with a treeview control (such as jstree) that allows multiple users to connect and see the same structure from different locations
- Allow each user to create/delete nodes in the tree
- Live update all connected users with any changes to the tree
- The treeview should allow for 2 levels – Parent and Child
- The parent nodes function as random number factories. Each parent factory will have the following properties when created:
  - The name of the factory
  - The random number pool (the pool of numbers from which to choose, e.g. 30 to 200)
- The child nodes for each factory represent the factory output -> the numbers generated
- When the parent factory is right clicked, allow an option for the generator to run. The input should be the number of numbers to create (only allow 1 to 15 in the number set).
- When the numbers are created, have them created as nodes below the factory (and also delete any previous nodes from previous generator runs)

<p align="center">Example</p>


```
◢  📁 Root node 1
   ├── 📁 Factory 1: (1-1000)
   ◢  📁 Factory 2: (15-25)
      ├── 📁 15
      └── 📁 18
```

- Utilize a database so that the information is saved (persistent)
- We should be able to close your web UI and reconnect with it in the same state
- Host the finished product on your own system to demonstrate your knowledge of networking and server setup

Example Test

John connects to the supplied URL and creates the first factory. Then Chris connects. Chris should see John's factory. Chris then right clicks the factory and chooses to generate 5 random numbers from the pool. The child nodes are generated with both Chris and John seeing the result.

Extra Credit will be given to those that go above and beyond the simple requirements…

Email your web page URL with your finished product to employment@passportparking.com. The best entries will receive a call regarding next steps in the interview process.