

Dear Candidate,

Please find below a small Javascript assessment task. Have a look and if you have questions, just shoot them back. If you are not able to make it for any reason, just let us know, clear communication and transparency are the key.

Instructions:

Implement a phone book that allows adding contacts with the following information for each contact:

- Name
- Phone number
- E-mail address

The phone book should allow listing available contacts and searching through them. Listed contacts should be sorted alphabetically by Name. A user should be able to search for a contact using a query that represents either a contact name or a contact phone number. A user should also be able to remove a contact from the phone book. The phone book can hold up to 10,000 contacts.

You can use the following as a starting point:

```
var PhoneBook = function() {  
    // constructor code  
}  
  
PhoneBook.prototype = {  
    add: function(contactInfo) {},  
    remove: function(index) {},  
    search: function(query) {},  
    list: function(contactsPerPage, page) {},  
};
```

Methods `add` and `remove` should add and remove a single contact, respectively, where `contactInfo` is an object as follows:

```
{  
    name: String,  
    phone: String,  
    email: String  
}
```

and `index` is the index of the contact to be removed.

Cognitev Hiring Process – 2017

Front-end

1st Phase: Technical Task

Name should be less than 100 characters, phone number should be a number and should be in the following format xx-xxx-xxxx and email should be a valid email address.

Method `search` accepts a query string as a single parameter and returns an array of all contacts that satisfy the passed query. The query represents a contact name or a contact phone number.

Method `list` accepts two parameters: `contactsPerPage` and `page` and returns a list of contacts based on the passed parameters and ordered alphabetically by name. For example, calling `list(10, 0)` should return the first ten contacts. Calling `list(15, 2)` should return contacts from the 30th to the 45th.

```
// Example:
var myPhoneBook = new PhoneBook();

myPhoneBook.add({
  name: 'John Smith',
  phone: '02-234-9182',
  email: 'j.smith@mail.com'
});

myPhoneBook.list(); // [ { name: 'John Smith', phone: '02-234-9182', email: 'j.smith@mail.com' } ]
```

You are free to modify the above code as you see fit. Use the attached data for testing.

An interface is not required but would be a plus. Sending back only the Javascript code would be sufficient.

Good Luck!!
Remember we Hire Rock Stars!!