

## Ethic Front-end coding exercise

# Contacts Search Dial Pad

## Introduction

This Exercise has been created by Ethic to assess front-end technical fit and we hope that you enjoy working through it. Please do not share or distribute as this exercise is confidential.

You are allowed to use the internet as a resource. However, the work presented in your solution should be your own, without the help or review of any other person.

## Overview

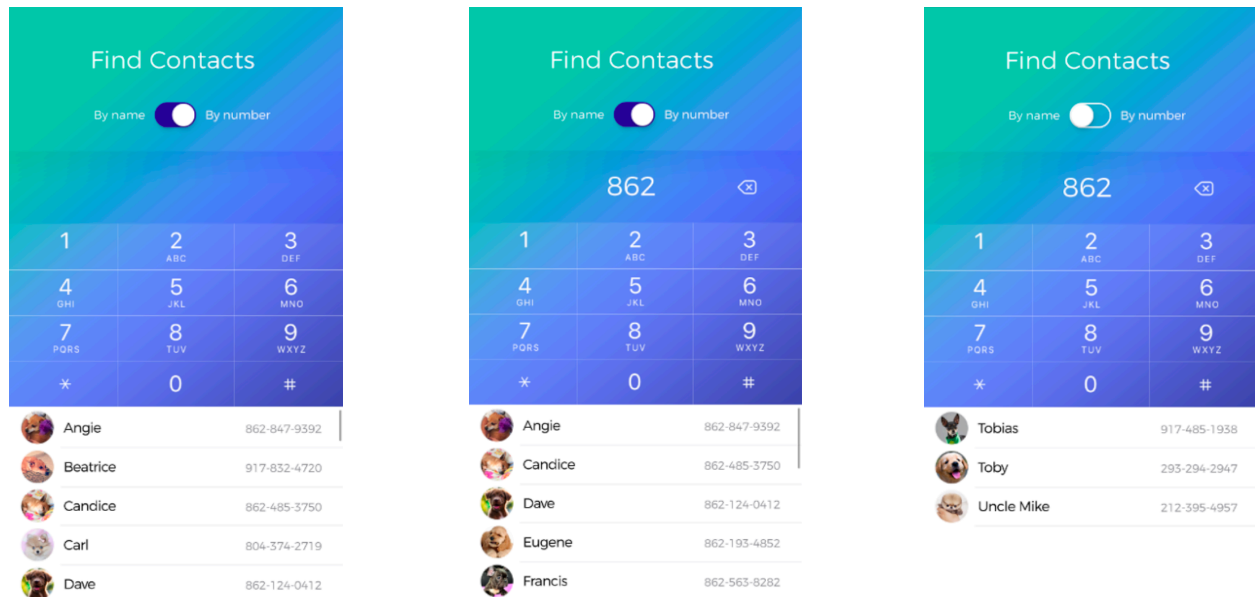
- The goal of the exercise is to create a contacts search application with a dial pad interface that allows users to search contacts by name or number as they input digits with their keyboard or click them on the screen.
- The JavaScript portion must be completed using native/vanilla JavaScript. The use of frameworks like Angular, React or Vue.js is not allowed. However, you are allowed to use independent libraries (eg. axios, fetch) if desired.
- Your application will only be assessed in a recent release of Google chrome. Feel free to leverage any feature supported by Chrome.
- Bootstrap (<https://getbootstrap.com/>) must be included in your application and used in the layout of your elements and for anything else you find it useful for. This should help lessen the amount of CSS you need to write.
- You'll find in the requirements below that your application will need to access JSON over HTTP. Because of this you will need to provide a local server and instructions on how we should setup and run it. A simple express.js server would work well for example.
- Your application does not need to be responsive. You are free to choose a fixed size at your discretion.

## Requirements

### Data

- Your application should use JSON stored in a .json file to provision the contacts data. This data should be accessed over HTTP. Feel free to use an HTTP client like axios or something similar if desired.
- A text file has been provided containing contact names and corresponding phone numbers. Images for each contact have also been provided. Use the contact information and images to create your JSON data shaped however you see fit.

## Look and Feel



- Above are visuals showing what your keypad interface should roughly look and feel like. Specifics around sizing, spacing and so forth are left largely at your discretion.
- The colors values needed for the gradient background are **#251285**, **#3d5afe** and **#04e7e7**.
- SVG files for star, pound and delete have been provided and should be used.
- The Montserrat font available through Google Fonts should be used (<https://fonts.google.com/specimen/Montserrat#standard-styles>).

## Functionality

Any functionality beyond the requirements below would be considered bonus.

- All contacts should be shown by default.
- Each contact should contain the image, first name and phone number of the contact.
- Contacts should be searchable by name or number, name being default. A Bootstrap switch style input should be used for toggling between these modes.
- When searching by name the dial pad keys 2-9 should map to the letters shown in the visuals. It follows the typical mapping for a phone dial pad. The third visual in the Look and Feel section shows an example where 862 matches Tobias, Toby, and Uncle Mike because of the letters each number maps to.
- All keys shown in the visuals should be supported, including the delete key next to the number input area which should remove the last number entered.
- The contact list should be scrollable once populated beyond a point that's left at your discretion.