

# Introduction

Thank you for your continued interest in Bluehost / Endurance! I really enjoyed speaking with you and would like to continue the interview process with a technical exercise.

For the coding portion, you may work in any language you would like.

Work on the exercise is time-boxed to **three hours**.

## The Exercise

You have been contracted by a new, shoe-string start-up for up to three hours of work in which you are expected to provide:

1. An architecture design of service(s). Documentation with visual examples encouraged.
2. A mock API service prototype. Include all source code, and it should be something that could be run/interacted with locally by start-up engineering reps.

Your work should be delivered as a shared GitHub repo.

The service(s) will support a mobile app, which the founders assure you will go viral within a month of its initial launch.

The service(s) will provide the following functionality:

- Storing location data from cellular transmitters attached to pet collars and collected by units installed on cell towers.
- Returning historical location data for a given pet (basic users can see the last 24 hours while premium users can see the last 30 days of data).
- Searching for and returning contact information for opted-in owners of other pets within a 5-mile radius. [Note: This is premium functionality.]

You will provide an architecture diagram for the service(s) and related infrastructure. The founders are not available for consultation; list significant assumptions you make in your design (including work to be done in different phases of development).

The service prototype will use canned location data and will be used for initial integration as the mobile app is developed. Again, list significant assumptions made in creating the prototype.