

## What We're Looking For

This is meant to give you an opportunity to demonstrate how you write code to solve business problems. Just like many real-life business problems, the manual process does not always have straightforward mapping to a computer algorithm. Use your judgment, but call out where you do and explain your thought process. Ask questions where you need to.

Nothing is perfect and nobody ever has enough time. Manage your time. Don't be afraid to make compromises but identify where and why you did.

We think about a week is appropriate but circumstances vary. If you need more time, let us know.

## Coding Project

Diaspora is a paper-and-pencil science fiction role playing game. It has rules for generating clusters of star systems connected by jump points.

The process for cluster creation can be found at <http://www.vsca.ca/Diaspora/diaspora-srd.html#clusters>.

Design and implement a web service for creating clusters using any language you like. The absolute minimum-viable submission should take the name of the cluster and return a json representation of the cluster.

The README.md should explain how to build and run locally. Do not assume the reader knows anything about the tech stack or the app. Do not assume anything about the user's machine. It might be a mac, linux, or windows.

Create a private account in GitLab - <https://gitlab.com> and push your code there. When you are ready to submit, your contact will give you the names of the reviewers to add to the project.

## Beyond Minimal Viable Submission

Just some ideas if you want to go beyond the minimum.

### **Persistence, real or imagined.**

Submitting the same cluster name returns the same cluster. Creativity encouraged.

### **CI/CD**

GitLab supports CD pipelines, <https://docs.gitlab.com/ee/ci/pipelines.html>.

## **Pictures!**

Return the json *or* a graphical representation of the cluster. Or both?