

Developer sample project

Introduction

This is a sample project you will develop so that we may assess your skills related to software development. Amongst other areas, we will assess the following:

- Code quality
- Code architecture
- The spec was followed correctly
- The program is bug free
- UI design
- Correct English (spelling and grammar)

The specification for this sample project is on the next page.

Specification

Write a desktop or web application in any suitable language that **creates, reads, updates and deletes People and Addresses**. One Person can have many Addresses.

Person fields:

Field	Constraints
First Name	Required, cannot contain numbers
Last Name	Required, cannot contain numbers
Date of Birth	Required
Nickname	Cannot contain numbers

Address fields:

Field	Constraints
Line 1	Required
Line 2	Cannot contain numbers
Country	Must be a valid country in Europe
Postcode	No special symbols/characters

The user should be able to view a list of all People, and search for a Person based on their First Name and Last Name. They should also be able to view a Person's Addresses.

The user should be able to create a new Person, and create Addresses for new and existing People. The user should not be able to add a Person with the same First and Last Name as an existing Person, or add a duplicate Address (with all the same fields) to an existing Person. However, two different People may have the same Address.

The user should be able to edit existing People and Addresses, however the duplication rules for People and Addresses mentioned above should still apply.

The user should be able to delete existing People and Addresses.

All data should be saved to a file in a human readable format, eg json, XML, YAML etc.

What to give us

Email a zip file containing:

1. The full source code or git repository
2. (Optional) If a web application, a link to a web page hosting the application.
3. If no link is given or the application is a desktop application, then a compiled program with clear instructions on how to run the compiled program on a windows machine