

# Loveholidays Programming Challenge

## The Problem

There is a website called **Programmable Web** (<http://www.programmableweb.com>) that lists a set of **Public APIs** that are free to use. Given this resource, find a suitable 3rd party address API and create a **small Spring Boot** application to retrieve the street address (and name if available) for the following **UK** postcodes:

- **W6 0LG**
- **SW1A 2AA**
- **BT48 6DQ**

## Problem Constraints

- It must be written using **Java 8** and use **Spring Boot** and **Gradle**.
- You can use **any** 3rd party libraries to help achieve your task.
- You can use **any IDE** (or text editor) of your choice (**spaces, not tabs please!**)
- Please use **JSON** as the data format.

## How to submit your answer

Create a **Github** or **Bitbucket** repo (we suggest **Bitbucket** as it has private repos - but you can choose whichever you are most comfortable with) and push your work to the repo. Once you have pushed your work, please send an email to "**programmer@loveholidays.com**" with your name as the subject line and the clone URL in the body. Someone at Loveholidays will clone your repo and review your code.

## Time Limit

We expect this to take **no more than 1 or 2 evenings** to do this challenge. Try to get your solution to us within **5 working days**.

## How we evaluate your code

- It must solve the stated problem :-)
- When we come to clone your project, it shouldn't take an unreasonable amount of time (think 5 minutes) for us to get it to compile and run.
- Keep your solution **simple** - don't make it too complicated
- We look for **good** programming practices
  - **Nice layout** and **easy** to read
  - **Clear** separation of concerns
  - **Appropriate** use of objects / interfaces
    - But don't go **AbstractFactoryFactoryFactory** crazy!
- We **like** unit tests. We also recommend using a **mocking framework** for API calls.

## Hint

- If you come in for a face-to-face interview, there will be a pairing exercise with a programmer here to extend your solution.