**Recruitment Assignment**

for

**Senior Java Developer**

presented by



**Date:** 2017-12-11

**Revision:** 1.0

Welcome recruit!

Firstly, congratulations! The fact that you have received this assignment, means that you have impressed the (quite demanding) EOH DIGITAL PLATOON interview panel sufficiently to justify entry into stage 2 of the recruitment process.

This assignment is designed to test your competence as a senior developer. Assuming you have the relevant skills, you should be able to complete it in less than 8 hours (perhaps 4 hours, but it really depends on your experience level).

The assignment assumes you have working experience with a number of technologies that EOH DIGITAL PLATOON uses on a daily basis. Perhaps you’ll need to sharpen your skills in one or more, but ideally you should be able complete the task without a large amount of Googling.

The specific technologies involved are:

* Git
* Apache Maven
* JBoss / WildFly application server OR Spring Boot

For this assignment you will build a RESTful web service, deployed on a JBoss / WildFly application server OR Spring Boot. The web service will store information into a super-basic database. We suggest using the in memory database provided by WildFly or Spring Boot.

Although the functionality will be very basic, the fact that your solution touches multiple enterprise software layers will make your recruiters confident that you can hit the battleground all guns blazing. Please note, while this assignment focusses on back-end capabilities, the typical developer will often cross between front and back end.

In addition to testing your Java skills, this assignment will also use Apache Maven and Git to confirm that you are familiar with these pervasive tools in enterprise development.

The rest of this document contains the requirements for the assignment. Please complete in your own time and share the final GitHub public repository with your recruiter.

EOH DIGITAL PLATOON will review your submission and use the results to make a decision about an invitation to the final in-person interview.

Good luck.

# Business Description

After deployment, your application will expose a single RESTful web service with the following endpoints:

* Register Cic
  + POST /cic
* Retrieve Cic Info
  + GET /cic/{cidId}

**You may ask: “What is a Cic?”**

A Cic is a single communication, perhaps a letter, perhaps an SMS, perhaps a Facebook post. In other words “A unique communication to be sent to a specific destination”. In our simple scenario, the Cic will be an email.

**Your next question may be: “What is the purpose of this web service”**

This service will be used to keep a centralised register of important emails sent to customers (such as invoices, statements or payment reminders). Hypothetically, this will be used by any back-end system that sends emails to customer, such as the CRM, the Accounting system and the marketing department.

The following domain model gives a UML view of the classes (and consequently, tables) that should form part of your solution:



# Evaluation Process

When you are completed with the development of your solution, please ensure you check your code into your own GitHub repository (all developers should have one). Send us the repo URL.

We will clone the project, review your code and try to build it locally. If it builds successfully we will deploy it on a WildFly 10 Application Server or run your Spring Boot application.

In short: It should build using Maven into a single EAR/WAR file which we can drop into a WildFly app server OR a Spring Boot executable jar. Once deployment is successful. What is most important is that we can compile, deploy and test your service.

# Conclusion

Besides the guidance provided above, please feel free to build the service as you please.

And once again, good luck!