



# Technical Test

## 1. Introduction

### Prerequisites

The candidate is expected to have access to a computer with a suitable development environment and access to the internet and email.

It is also expected that the candidate will have a suitable professional environment in which to work.

### Instructions

The purpose of this assignment is to produce a small working application for review. The details are given in section 2.

The aim is to assess your problem solving approach, your ability to turn your solution into working code and the way in which you structure your code.

You are required to:

- Produce working, object-oriented code together with appropriate tests to solve the problem
- State clearly any assumptions made (either in code comments or as a separate README file)

If you have any issues with the programming assignment, please ensure that you inform the test coordinator immediately.

You are expected to work on this task on your own, without help or advice from others. If you need clarification on any aspect of the assignment, please seek help from your test coordinator.

The test does not include a set time limit, but the time it takes you to implement your solution may be taken into account during assessment.

Once complete, you should create an archive file for your code (zip or tar.gz) and email it back to your test coordinator. Please do not upload the code to your public github account.



## 2. Coding Assignment

### Food Hygiene Ratings

The Food Standards Agency rates restaurants and other food outlets with a hygiene rating from 1-5 stars (or an “Exempt” rating). In Scotland, they are rated as “Pass” or “Needs Improvement”.

You must create a simple web application using the API and data sources at <http://api.ratings.food.gov.uk/help> that fulfils the user story below.

### User Story

The following user story needs to be implemented.

As a user I want to see how food hygiene ratings are distributed by percentage across a selected Local Authority so that I can understand the profile of establishments in that authority.

### Acceptance Criteria

Given a local authority with establishments rated as follows:

- Establishment A: 5
- Establishment B: 5
- Establishment C: 1
- Establishment D: Exempt

When I select that local authority then I should see a tabular breakdown as follows:

Rating	Percentage
5-star	50%
4-star	0%
3-star	0%
2-star	0%
1-star	25%
Exempt	25%



## Further implementation notes

Your application should provide a drop-down list of Local Authorities for the user to select from and then display a table of data as per the acceptance criteria above for that authority.

The FSA's API is a simple RESTful API that returns JSON and you may use any frameworks you like to help support accessing this API.

The code and design should meet the requirements, and should consider future extension or maintenance.

The code should be well-structured, commented, have error handling and include a suitable selection of tests.