

Introduction

This test is intended to quickly assess your technical skills within a range of areas related to software development in .NET. There is no time limit for you to complete the test but it should take no more than a couple of hours.

Please check in your code into a public repo (GitHub/Bitbucket). Add a Readme.md which contains a brief statement of why you used the tools or libraries as well as any instructions about how to start and use the app.

When you are done, please send an email to your recruitment contact, with a link to the public or shared private repo.

We really appreciate the time you are taking to complete the task and look forward to getting to know you more from your coding side. We will provide you with feedback once we have received your email and have reviewed the repository.

RESTful Service

Create a RESTful web service that can be accessed via HTTP. The service should allow users to create and populate lottery draws. A lottery draw consists out of primary and secondary numbers. For instance, we may have 49 primary numbers followed by two special numbers.

A lottery draw has the following properties:

- Name (unique identifier). E.g. '49s'
- Description. E.g. '49s Lottery'
- Date of the draw. E.g. 23/11/2016
- Total amount of primary numbers. E.g. 49
- Range of primary numbers. E.g. 1 to 49
- Total amount of secondary numbers. E.g. 2
- Range of secondary numbers. E.g. 1 to 10
- Five winning primary numbers. E.g. 7, 23, 5, 12, 49
- Two winning secondary numbers. E.g. 4, 8

Create a Lottery Draw

Implement RESTful end-point that will allow you to create a new lottery draw by submitting a JSON object containing lottery details outlined above. At this stage the winning numbers should not be specified.

Specify Winning Numbers

Implement an end-point that will allow you to specify winning numbers for an existing lottery. When saving the results, validation should take place to ensure that both primary and secondary winning numbers fall within a range specified when creating the lottery.

Search Lottery Draws

Implement an end-point that will allow you to search for lottery draws by date.

Interface

Create a simple web interface using AngularJS or React. Please do not spend any time on styling as we are mainly interested in functionality and how you structure client and server side code.

Create Lottery Interface

Implement a simple form that would allow user to create a new lottery and persist it in memory via RESTful interface that you implemented earlier in the exercise.

Enter Lottery Results

Implement a simple form that would allow you to enter winning numbers into an existing lottery draw.

Optional Tasks

Logging

Application should have basic logging for debugging and error handling purposes.

Unit Testing

Application should have a few unit tests.