

Sitecore Recruitment

Technical Exercise

(Publish/Subscribe Pattern)

Introduction

We want to get a better understanding of (a) the code you produce but also (b) how you go about architecting an extensible solution and finally (c) how you might explain a concept or pattern to others.

Rather than coding something in front of us, which is unrealistic in an interview situation, what we'd like you to do is produce a small solution that demonstrates the concept of the Publish/Subscribe pattern.

Task Description

Implement the concept of Publish/Subscribe pattern. It should:-

- Take an input of data
- Transform that data in some way
- Transport that data to a set of subscribers
- The subscribers should be able to display the transformed data

Estimated Implementation time: ~ 4 hours

Important note: We will assess your skills in both scripting and styling – find a balance between both areas to show off your capabilities, so that we can get a better impression of your technical skill level.

Delivery

- Source code that has been tested and is ready to be compiled and executed on any environment
- Any manual step in setting up should be scripted in automated manner (with tools like NodeJS, PowerShell, Visual Studio project file)
- Please deliver this in a publicly available repository like GitHub, BitBucket etc. with documentation about your concerns, decisions, guiding, testing etc.

Implementation Requirements

- This should be created in pure C#.
 - You are free to use third-party libraries to help with your implementation.

- Each part of the solution should be testable by design.
 - We are not looking for 100% code coverage.
 - Show examples of how individual parts are unit testable.

Technical Interview Expectations

- We would like you to be able to describe your solution, and use it to explain the concept of Publish/Subscribe pattern, as well as the advantages / disadvantages that it might have.
- We can then talk about how we can extend and adapt our solution for more complicated scenarios and the changes that would be involved.

NOTE:

The technical exercise is only a starting point for the conversation we'll have during the interview. You should not try to use all the technologies / practices / patterns you outlined in your CV; you should not try to make this test task more complex than it's necessary. We'd like to see a piece of code as you would do your daily working task.
