

# Developer Code Test


## Overview

The purpose of this test is to see if a candidate has the necessary skills to be successful in the job. You will create a simple work order system using Microsoft .NET. The database for the application has been provided.


## Database Structure

The database consists of two tables: WorkOrders and Technicians. There is a foreign key relationship on the WorkOrders table to the Technician table. A WorkOrder can have a single technician assigned to it.

### Technicians

	Name	Data Type	Allow Nulls	Default
	TechnicianID	int	<input type="checkbox"/>	
	TechnicianName	nvarchar(30)	<input type="checkbox"/>	
	TechnicianEmail	nvarchar(50)	<input type="checkbox"/>	
			<input type="checkbox"/>	

### Work Orders

	Name	Data Type	Allow Nulls	Default
	WONum	int	<input type="checkbox"/>	
	Email	nvarchar(50)	<input checked="" type="checkbox"/>	
	Status	nvarchar(20)	<input checked="" type="checkbox"/>	
	DateReceived	datetime	<input checked="" type="checkbox"/>	
	DateAssigned	datetime	<input checked="" type="checkbox"/>	
	DateComplete	datetime	<input checked="" type="checkbox"/>	
	ContactName	nvarchar(50)	<input checked="" type="checkbox"/>	
	TechnicianComments	nvarchar(MAX)	<input checked="" type="checkbox"/>	
	ContactNumber	nvarchar(25)	<input checked="" type="checkbox"/>	
	TechnicianID	int	<input checked="" type="checkbox"/>	
	Problem	nvarchar(MAX)	<input checked="" type="checkbox"/>	
			<input type="checkbox"/>	

## Application Requirements

This should be a web application.

The home page of the site should show all work orders that have a status of *Open*. All of the fields within the WorkOrders table should be displayed.

An option to view work orders by the status should be given. How you chose to implement this is up to you. A drop down list with all of the different statuses would be one way to do it. Changing the drop down will update the list of work orders shown. This update process should happen WITHOUT reloading the entire page.

There should also be a button to add a new work order. This button will open a modal dialog with the following text fields to fill in:

Email

ContactName

ContactNumber

Problem

Technician (drop down list allowing the user to choose a Technician)

When submitted, this will add a new record to the WorkOrders table, populating those fields with what the user filled in. In addition, the DateReceived field should be set to the date/time the work order was submitted.

Things that we will be looking for:

- The application should be a Microsoft.NET project.
- Use of the EntityFramework or another ORM is encouraged.
- Using a responsive framework such as Bootstrap for the layout is encouraged.
- Creating a Web API project for data access would be a big plus.
- Use of a JavaScript framework such as React or Angular 2+ is acceptable but not required.
- Basic documentation