

Creating Test Data

Getting Started

One requirement for your assessment is the creation of a test plan and test log. In this session you will be given opportunity to make a start on creating this.

You are required to create suitable testing for the web form that allows you to edit / update and address.

| | | | |
|-----------|----------------------|------------|--------------------------------------|
| AddressNo | <input type="text"/> | | |
| House No | <input type="text"/> | County | <input type="text" value="Unbound"/> |
| Street | <input type="text"/> | Date Added | <input type="text"/> |
| Town | <input type="text"/> | | <input type="checkbox"/> Active |
| Post Code | <input type="text"/> | | |


[lblError]

The fields we are interested in are...

- House number (String)
- Street (String)
- Town (String)
- Post Code (String)
- County (Integer)
- Date Added (Date)

The next thing to do is to take a look at the table design in the data layer of the system.

Look at the table definition for tblAddress to inspect the table's design and properties.

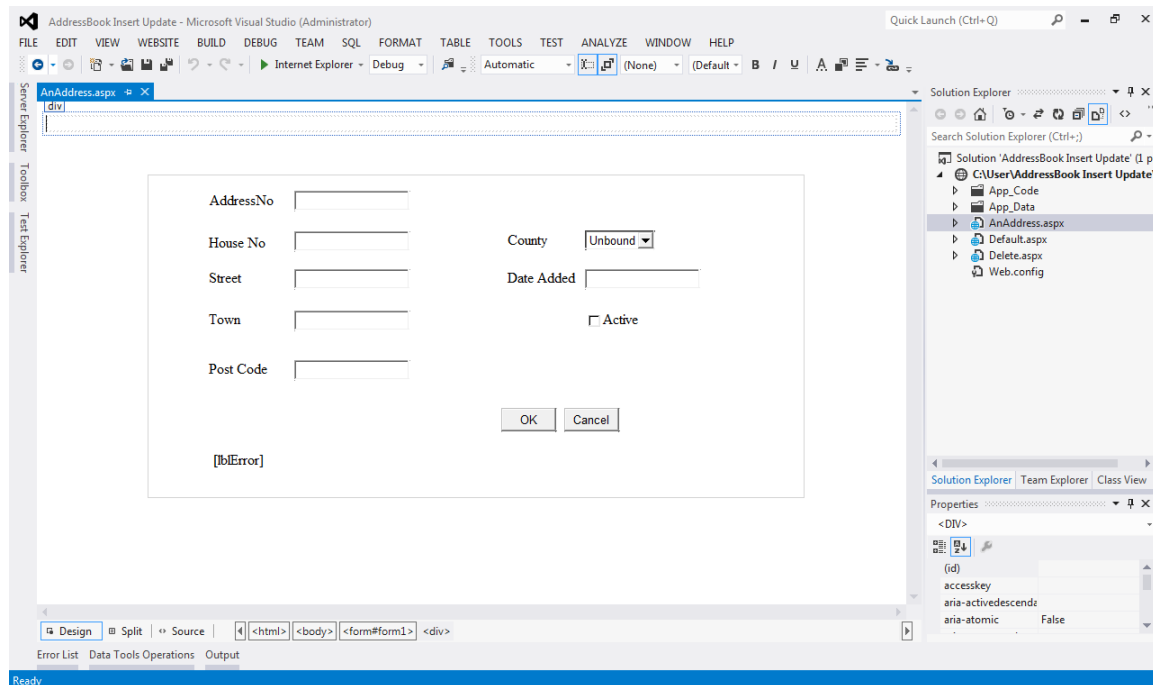
| | Name | Data Type | Allow Nulls | Default | |
|--|---|-------------|-------------------------------------|---------|--|
| |  AddressNo | int | <input type="checkbox"/> | | |
| | HouseNo | varchar(6) | <input checked="" type="checkbox"/> | | |
| | Street | varchar(50) | <input checked="" type="checkbox"/> | | |
| | Town | varchar(50) | <input checked="" type="checkbox"/> | | |
| | PostCode | varchar(9) | <input checked="" type="checkbox"/> | | |
| | CountyCode | int | <input checked="" type="checkbox"/> | | |
| | DateAdded | date | <input checked="" type="checkbox"/> | | |
| | Active | bit | <input checked="" type="checkbox"/> | | |
| | | | <input type="checkbox"/> | | |

The next thing to do is to examine the properties for each field.

For example HouseNo is defined as varchar(6) which means the maximum size is 6 characters.

Also note the data types for each field.

Once you have done that close the table definition and open AnAddress.aspx in Visual Studio.



The next step to make a note of which fields must be completed and which ones may be left blank.

Once you have all of this information you may start writing your test plan.

We shall work in detail on the house number field. It is then up to you to do the rest.

Make sure that you have a copy of the test log / test plan from the module web site.

Description of Item to Be Tested:

This field stores the house number of the address. This may be a number or it could contain a letter e.g. 33B so the data type is string. The field must be no more than six characters and may not be blank.

It is useful to write here as much information as possible to get you thinking about the rules for this field.

We may now start to construct the test data. One thing to note about creating test data is that it is hard to create hard and fast rules. You will need to make some intelligent choices about how to interpret and apply the test procedure.

Extreme Minimum

For this test item with a string data type we cannot enter a negative count of letters. The smallest number of characters is an empty string.

| Test Type | Test Data | Expected Result | Actual Result |
|------------------|------------------|------------------------|----------------------|
| Extreme Min | Not applicable | | |

Boundary Tests

Since we cannot enter -1 characters the minimum -1 test does not apply. However we can test the minimum +1. Since this is a required field entering a blank string should produce a suitable error message.

| | | | |
|----------------|----------------|--|--|
| Min -1 | Not applicable | NA | |
| Min (Boundary) | Blank string | Display an error message stating required field. | |
| Min +1 | 1 character | Should accept the data | |

We have already established that the maximum field size for field is 6 characters so for the upper boundary test we could use the following test data...

| | | | |
|----------------|---------|---------------------------------|--|
| Max -1 | 12345 | Should accept the data | |
| Max (Boundary) | 123456 | Should accept the data | |
| Max +1 | 1234567 | Should display an error message | |

Mid and Extreme Max

The mid range value is easy to calculate. The minimum is 1 character, the maximum is 6, so the mid is a string 3 characters long...

| | | | |
|-----|-----|--------------|--|
| Mid | 123 | Should be ok | |
|-----|-----|--------------|--|

For the extreme maximum generate a string of some stupid length greater than 40 characters...

| | | | |
|-------------|---|-------------|--|
| Extreme Max | 12345678901234567891234567890123456789 12345678901234567891234567890123456789 Etc.. | Should fail | |
|-------------|---|-------------|--|

Invalid Tests and Other Tests

Since this is a string data type it will allow any characters we give it. This section may not be applicable for this field. However! You will need to think about dependencies this field has with other fields.

For example must another field be completed prior to this field?

In this case we shall use the following test data...

| | | | |
|-------------------|----|--|--|
| Invalid data type | NA | | |
| Other tests | NA | | |

Once you have created the test data for this field you need to write the test data for all of the other fields on the page.

Once the test data has been created you need to type the test data into the page and see if you get the expected results.

(Note, testing is really not the most exciting task in the universe. It is a necessary evil rather like ironing or washing the dishes.)