# Assignment 7 Extension Methods and Verification

In this assignment, you will take what you did in the last six assignments and enhance the functionality to include extension methods and a verification page.

Before starting on this assignment read about abstraction

* <http://msdn.microsoft.com/en-us/library/vstudio/bb383977.aspx>

### Extension Methods

Extension methods are not a requirement and they do not accomplish anything other than making code cleaner. Everything an extension method accomplishes could be done with a static class and static methods, but by using an extension method you are making it much easier for another developer to find your methods or even you years later.

The article I provided above should give you all the information you need to create an extension method. You will need to make your own extension method that adds a method to format submitted user’s phone number to the phone number format (###) ###-####. The catch is, a user will be able to supply multiple formats of phone numbers and your method needs to take any of them and send that back.

Format examples:

* 19897747376 – With country code (Note the format chosen is US specific so country code is not needed)
* 9897747376 – Without country code
* 7747376 – Without area code (Note that 989 is assumed if the area code is missing)
* 7376 – Campus extension (Note all extensions will be (989) 774-EXTENSION)
* 989-774-7376 – Different formatting
* 989.774.7376 – Another different formatting

Your method should be able to take any number of different phone number formats in. Users are unpredictable, but in the end all the numbers will have to be there. If you remove formatting and the number is not 10, 11, 4, or 7 numbers long then it should be considered and invalid phone number and the original value should be returned. Keep in mind that the last two above are just examples of what users may submit. In the end your method should be able to strip out all non-numeric characters before applying formatting.

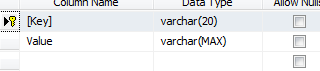
### Form Additions

You will need to add a new field on your form that asks for the user’s phone number. This is NOT a required field and does not need validation currently. However, your extension method should be used before putting the phone number in the database.

You will need to add a confirmation section after the user hits submit that displays what the user entered back to the them. The user will then either be able to confirm the submission and submit the values to the database or click a button to edit what they entered. It is important that no information should be sent to the database until the user confirms the data. This should all be done on default.aspx.

After the user has confirmed their submission and the data is put up to the database, you will need to have a thank you page with a message that is confirmed is pulled from your database. This will require you make another table to store settings.

Your table should be similar to this:



This will allow us to store any number of settings identified by their “Key.” The “Key” column should be the primary key for the table.

You will need to add a new section to your admin.aspx page that allows the administrator to change the message for the Thank You page.