C# Challenge

# Exercise 1

Create a C# ASP.NET WebForms Application

1. Add a common MasterPage
2. Display the current date and time in a label in yyyy-MM-dd hh:mm:ss format
3. Refresh the time using a timer event every 5 seconds

**Note:** Make use of UpdatePanels throughout the exercises to minimize full page refreshes

# Exercise 2

Add a content page (rounding.aspx) to the MasterPage from the previous exercise

1. Add a text-box for the user to enter a date time string
2. Add a Test button
3. Clicking on the submit will do client-side validation to ensure the input is in yyyy-MM-dd h:mm format
4. If the validation fails, show an alert and halt processing further
5. If the validation passes, round the input to the nearest 15 minutes on the server and display inside another label
6. The rounding logic should be in a business logic class
7. The method should take in a DateTime round it and return it as a DateTime
8. Write a series of unit-tests in a separate class to test the math:

**Testing Examples**

1. 2015-05-18 7:01 🡪 2015-05-18 7:00
2. 2015-05-18 7:07 🡪 2015-05-18 7:00
3. 2015-05-18 7:08 🡪 2015-05-18 7:15
4. 2015-05-18 7:15 🡪 2015-05-18 7:15
5. 2015-05-18 7:22 🡪 2015-05-18 7:15
6. 2015-05-18 7:23 🡪 2015-05-18 7:30

# Exercise 3

Add another content page (timestamp.aspx) to the MasterPage

1. Add a Log Timestamp button
2. Add a simple one column grid
3. Clicking on the button will confirm with the user whether to log the Timestamp or not
   1. If yes, add the current time from the MasterPage to the grid in yyyy-MM-dd hh:mm:ss format
   2. If no, don’t do anything

**Note:** you don’t need to persist the data

# Exercise 4

Add a home page (default.aspx)

1. Show link buttons for rounding.aspx and timestamp.aspx pages
2. Clicking on the link button will navigate to each page

***Send the zipped source-code including the solution file.***