Server side programming and AJAX requests

Michał Okulewicz, MSc
Warsaw University of Technology
Faculty of Mathematics and Information Science
M.Okulewicz@mini.pw.edu.pl
http://www.mini.pw.edu.pl/~okulewiczm

Server side programming tasks

- We will be using Microsoft .NET WebForms as an example of server side scripting

- In all the tasks please use Visual Studio 2012, 2013 or 2015

- DISCLAIMER: This is NOT a tutorial in WebForms progamming

Task 1, part 1

- Finish Task 3 (Spreadsheet) from the previous module
- Add another WebForm for generating plain CSV (with comma or tab as separator)
    - Remove all the code (except Page directive) from the .aspx file
    - Implement a page load method in the .aspx.cs file
    - Set the content type and encoding
    - Play with the Content-Disposition HTTP header (it may be necessary to set IISExpress as the web server for the project)
    - Add a link to the new WebForm for viewing the file in browser and downloading it as CSV

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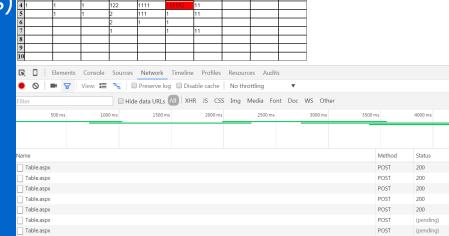http://www.mini.pw.edu.pl/~okulewiczm

Task 1, part 2

- Choose an HTML class name for the input elements (e.g. `class="cell"`)

- Add jQuery to the scripts in the WebForm with table

- On change of the content of a single cell send an AJAX request to change its value in the session variable

- Before the cell is updated set its background to red colour and if the update is a success change it to white (you may add a Thread.Sleep on the server side to observe the effects)

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Task 2

- Create a WebForm generating a JSON with a random number of groups with a lists of random integer values assigned to them

```
{"data":[
    {"group": "EXQ","values": []},
    {"group": "GMO","values": [1312707151,1967355143]}
]}
```

- Create an HTML with an AJAX call in JavaScript (possibly with the help of jQuery) which will generate a table from a JSON

- Investigate *reduce* method of the Array

Get data

Group	Values	Min	Mean	Max
ATA	956097062	956097062	1828925472.5	1745656821
	1745656821			
LYB	1649636865	593261393	1946267561.5	1649636865
	593261393			
	289359353			

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Task 3

- Call WebForm twice

- Wait for both queries be completed and reduce their results by creating a union of values from identical groups

- (You might change group names to shorter in order for them to be repeated more often)

- After receiving

```
{"data":[{"group":"C","values":[10,15,19]},{group":"B","values":[11]}]}
{"data":[{"group":"B","values":[15,11,10,11]},{"group":"A","values":[12,12,11]}]}
```

- Displays

Group	Values	Min	Mean	Max
C	10	10	15	19
	15			
	19			
B	11	10	12	15
	15			
	11			
	10			
	11			
A	12	11	12	12
	12			
	11			

Michał Okulewicz

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