**Instructions**

Open the Visual Studio solution. On the DatabaseScripts folder you will find an SQL script for creating the tables and stored procedures needed. Make sure to update the connection strings with the information for the SQL Server instance that you are using.

On the UnitTest project, there's an example of what tests should look like. Please make sure you write tests for each requirement.

**Requirement 01 -TEST**

Description

Create a page that lists all users and allows to filter them by first/last name.

Functional Requirements

* Display a user list showing all their attributes (required)
* The list should have server side pagination (required)
* The list should be sortable by all columns (required)

Business Rules

* Either the first or last name can be null, but not both at the same time.
* The filter by name should search both first and last name.

**Requirement 02**

Description

Create a Web Service that returns a user based on its email.

Business Rules

* The mail can't be null or empty.

**Requirement 03**

Description

Create a product entity.

Required functionality

* Create all the classes and methods needed for the entity (business, data, etc. BusinessEntity + BusinessComponent)
* Create a validation method

Business Rules

* A product has the following attributes:

|  |  |
| --- | --- |
| ID | Int |
| Name | String |
| Price | Decimal |
| Description | String |
| Active | Boolean |
| Stock | Integer |
| Next revision date | Date |

* The ID can't be null
* The name needs to have between 5 and 30 characters.
* The name can only contain: a-z, A-Z and spaces.
* The price can't be negative or 0.
* The description has a maximum of 2048 chars
* If active = true then the price and name are mandatory
* Stock needs to be positive
* The next revision date can't be null.
* The date needs to be greater than today.

**Requirement 04**

Description

Generate a page for creating new products

Additional functionality

* Add the following client side validations
* Name length
* Date validation