2018 Web Applications

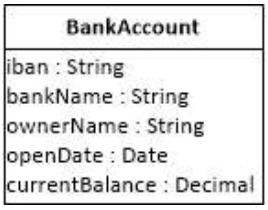
Assignment 1

Develop a Minimal JavaScript Front-End App

Attention: this is not a team assignment, but an individual assignment, so all participants must submit a solution.

The purpose of the app to be developed is managing information about bank accounts. The minimal app deals with just one object type: `BankAccount`, as depicted in the class diagram below. In the subsequent parts of this course, you will extend this simple app by adding integrity constraints, enumeration atributes, further model classes, and the associations between them.

Figure 1: An information model defining an object type



We make the simplifying assumption that we can have all the data of the app in main memory. So, on application start up, the data is read from a persistent data store. When the user quits the application, the data have to be saved to the persistent data store, which should be implemented with the Local Storage API.

Your app should be based on the information design model shown in Figure 1. Following our Minimal App Tutorial, you have to organize your JavaScript code base in three folders: `minapp/src/m` for the model part, `minapp/src/v` for the view part and `minapp/src/c` for the controller part. In the model part, you have to implement the object type defined in the class diagram, either in the form of a JavaScript constructor function (representing a class), as in the Minimal App Tutorial, or in the form of an ES6 class.

You can use the following sample data for testing your app:

IBAN	Bank	Owner	Opening date	Current balance
DE89860100900123456789	Postbank Leipzig	Hans Meier	2009-05-12	200,39
DE89120700000047114711	Deutsche Bank Berlin	Hans Meier	2011-11-11	1.200,55
DE66100800000047114711	Commerzbank Berlin	Erna Meier	2013-02-21	62,89

Make sure that

1. your pages comply with the XML syntax of HTML5 (for verifying the correctness of your pages you have to validate them setting the validator field `Preset` to "HTML + SVG 1.1 + MathML 3.0")
2. international characters are supported by using UTF-8 encoding for all (HTML and JavaScript) files containing international characters.

Make sure that your JavaScript code complies with our Coding Guidelines. For finding syntax errors and violations of coding guidelines, you should check your code with JSHint (http://www.jshint.com). E.g., instead of using the unsafe equality test with "==", always use the strict equality test with "===".

Submission

Submit your solution code by packaging your app folder in a ZIP archive, and include your name in its file name (e.g. assignment_1_wagner.zip).

Evaluation Criteria

Type	ID	Description	Total Points
Penalty	P	2.5% penalty per day for late submission	-2.50%
Functionality	F1	Show list of Bank Accounts	2.00
	F2	Add new Bank Accounts	2.00
	F3	Update Bank Accounts	2.00
	F4	Delete Bank Accounts	2.00
Quality	Q1	HTML compliance	1.00
	Q2	Coding Guidelines	1.00

Submission status

Submission status	No attempt
Grading status	Not graded
Due date	Sunday, 15 April 2018, 11:55 PM
Time remaining	Assignment is overdue by: 10 days 20 hours
Last modified	-
Submission comments	Comments (0)

Add submission

Make changes to your submission

◄ Reading assignment 1: JS Front-End Web Apps Tutorial Part 1

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Quiz 1 (VG1C, Seminarraum 0.04) ►