

WEBAP 1 Exam

You are provided with two files, as a startup for a very bad banking solution implementation:

- one SQL script (bankAccounts.sql) that will:
 - o create a table of persons
 - o insert some data into this table
- one frontend HTML (bankInterface.html) that will:
 - o load JQuery
 - o load a file bankRequest.js (that you need to write/implement)
 - o Display a title
 - o Ask for a user's name (in an input)
 - o Display a button
 - o Contain three more divs that will be used in your js implementation.

NOTE: DO NOT change anything in the two above files. IT IS forbidden to make any changes!

You are requested to write/implement TWO files: the server-side PHP (that will accept requests and answer questions) and the bankRequest.js.

The backend 24 points

With this PHP file, you must do the following:

- Answer the question "What amount of money does a user still have in his/her account?"
- Deposit a given amount of money into a user account.
- Withdraw a requested amount of money from a user account, when possible (the account balance must always be positive).

Implementation details:

- You should use GET variables to ask the question/deposit/withdraw money.
- When the appropriate GET variables are not set (an incorrect request was made) your script should NOT output anything!
- Separate the THREE cases, use different GET variable names for each scenario as follows:

Scenario 1 6 points

"What amount of money does a user still have in his/her account?"

- You should be given JUST a user's name, in a GET variable.
- Search in the existing ppl table for the given user and display his/her account balance. IF the user was not found, print an error message: "Unknown user".

Scenario 2 6 points

Deposit money

- You should be given a user's name, AND the amount of money to put in his/her account in two different GET variables.
- Update the user's account balance with the amount of money. **NO validation** should be done in this case. Assume that the user EXISTS and just change the amount in the database.
- Display a success message: "Hopefully, we saved your money. Rest assured that you are safe with us!"

Scenario 3 12 points

Withdraw money

- You should be given a user's name, AND the amount of money to withdraw from his/her account in two different GET variables.
- CHECK if the balance becomes negative when withdrawing from the account. IF the balance would be negative, display an error message ("You can't have that") and do NOT change anything in the database.
- IF the balance would still be positive, make the withdrawal – update the Balance field with the amount withdrawn and display a success message: "Your transaction has been recorded!"

The frontend 24 points

This is your js script named bankInterface.js. In this you must do the following:

- When the page has loaded, link a new JS function to the click of the Login button (Get account details). **2 points**
- When the login button was clicked:
 - o Fill in the AmountInAccount div with the result of a call to the php backend script for the username in the User input (**Scenario 1**). **4 points**
 - o Create a new input for the amount and give it an id **2 points**
 - o Create a new button to allow the user to deposit money and give that an id as well **2 points**
 - o Create a second new button to allow the user to withdraw money and give it an id. **2 points**
 - o Make the NextAction div – empty **2 points**
 - o Append to the NextAction div the newly created elements: input and two buttons **2 points**
 - o Link two new functions (one for deposit and one for withdraw money) to the newly created buttons **2 points**
 - o In the deposit money function, fill in the ResultOperation div with the result of making a deposit for the given user, with the amount of money specified in the input (Scenario 2). **3 points**
 - o Similarly, for the withdraw function, fill in the ResultOperation div with the result of making a withdrawal for the given user, with the amount of money specified in the input (Scenario 3). **3 points**

Final task – improving the frontend – 6 points

There are many ways we can still improve our banking solution. However, the users have complained for a good reason: AFTER they do a deposit OR withdrawal from their account, the balance is not automatically refreshed. They need to make a new click on “Get account details” to check if their amount of money was indeed deposited/withdrawn from the account.

Please fix this bug in our application.

Note: To do this, you may need to check for some new parameters of the JQuery load function. You can trigger a new call to a JS function once the deposit/withdrawal has been processed.