JAVAVAULT DOCUMENTATION

**User Guide**

Welcome to our online banking application! In this guide, we will explain how to use our app to its fullest potential.

**Registration**

To get started, you need to register an account. You can do so by clicking the "Register" button on the home page and filling out the registration form. You will need to provide your e-mail, password, name, and surname. Your password must be at least 8 characters long with at least one capital letter, one lowercase letter, and one digit.

**e-mail Verification**

After registering, you will receive an e-mail with a verification code. To verify your e-mail, enter the code in the verification form provided on the login page. Once verified, you can log in to your account without needing to verify your e-mail again.

**Login**

To log in to your account, enter your e-mail and password on the login page. If you forgot your password, you can reset it by clicking the "Forgot Password" button and following the instructions provided.

**Forgot Password**

You can recover your password by clicking the “Forgot Password” button. You will be asked to enter your e-mail. The system will check if the e-mail exists in the system and, if it does, it will send a new temporary password to the provided e-mail. The user can then log in with the temporary password and change it later in the account settings.

**Accounts**

You can add multiple accounts to your profile by clicking the "Create new bank account" button in the accounts section of your profile page. You will need to provide your account type - checking or savings. The account will be automatically generated and will show in your existing account(-s) table.

**My Account**

A logged in user can change his account details like name, surname, e-mail and password as well. The user may be asked to enter his current password to confirm the operation, for example, when changing his password to a new one.

**Transactions**

To make a transaction, click the "New Transaction" button in the transactions section of your profile page. You will need to provide the account from which you wish to send the transaction, the account number of the recipient, the amount (EUR), and a description of the transaction.

**Database Structure:**

**Admin Guide:**

The Online Banking application has an Admin Panel that can be accessed by administrators/admins through the Admin Panel button on the homepage. The Admin Panel provides access to several features and options, including the ability to manage user accounts and transactions.

1. User Management: Admins can find users by e-mail and view their account numbers and profile details. They can also modify user data, including passwords, names, surnames, and e-mails. This can be done by clicking on the "View user" button in the Admin Panel, entering the e-mail of the user they wish to manage, and selecting the desired action provided.
2. Transaction Management: Admins can view transactions by providing the account number of the sender or receiver. This can be done by clicking on the "View transactions" button in the Admin Panel, entering the account number, and selecting the desired action provided.
3. Approval of Transactions: Admins can approve or cancel unapproved transactions. This can be done by clicking on the "View unapproved transactions" button in the Admin Panel, reviewing the unapproved transactions, and selecting the desired action provided.

Note: Admins have access to sensitive information and should proceed with caution when making changes to user accounts or approving transactions.

**API documentation**

Endpoint: /new-transaction

* HTTP Method: GET
* Description: Returns a web page with a form to create a new transaction.
* Response Codes:
  + 200 OK - The web page was successfully returned.
  + 302 Found - The user is not authenticated and is redirected to the login page.
* Request Headers: None
* Request Body: None
* Response Body: HTML web page

Endpoint: /new-transaction

* HTTP Method: POST
* Description: Processes the form data submitted to create a new transaction.
* Response Codes:
  + 302 Found - The transaction was successfully created and the user is redirected to the account view page.
  + 200 OK - The transaction could not be created due to validation errors, and the user is shown the form with error messages.
  + 302 Found - The user is not authenticated and is redirected to the login page.
* Request Headers: None
* Request Body:
  + accountFrom: The account number to transfer the funds from.
  + accountTo: The account number to transfer the funds to.
  + amount: The amount to transfer.
  + reference: A description of the transaction.
* Response Body:
  + HTML web page with form and validation errors (if any).

Endpoint: /login

* HTTP Method: GET
* Description: Returns the login page with a form to enter user credentials.
* Parameters: None
* Returns: The login page with an empty User object.

Endpoint: /login

* HTTP Method: POST
* Description: Authenticates the user with the provided e-mail and password, and sets the user session if authenticated. If the user is not active, an activation code is required. If the provided code matches the user's verification code, the user is activated and redirected to the home page. Otherwise, an error message is returned.
* Parameters:
  + user: The user object containing the e-mail address of the user attempting to log in.
  + password: The password entered by the user attempting to log in.
  + verificationCode (optional): The activation code entered by the user if the user is not yet active.
  + e-mail: The e-mail address entered by the user attempting to log in.
  + session: The user session object.
* Returns:
  + If the user is authenticated and active, the user is redirected to the home page.
  + If the user is not active and no verification code is provided, the login page is returned with an error message indicating that the user's e-mail address is not activated.
  + If the user is not active and an invalid verification code is provided, the login page is returned with an error message indicating that the verification code is not valid.
  + If the authentication fails, the login page is returned with an error message indicating that the user's e-mail or password is invalid.

**Contact Information**