Project Overview: Application for Command Line Banking

Project made by Lou Jerick Liwanag (N01630199) , Khant Ti Kyi (N01709727)  
  
A Node.js project called the Command Line Banking Application simulates basic banking features in a command-line interface. It has a menu-driven system for a variety of banking processes, strong user authentication, and is built for modularity, scalability, and ease of enhancement.  
  
  
1. User Authentication: - Users enter their PIN and email address to log in.   
Correct PIN entry can be attempted up to three times per session.   
The account gets locked if authentication is unsuccessful ten times in a row.   
  
2. Banking Activities:   
- Withdraw Funds: If the balance is adequate, deduct the designated sums.   
- Deposit Funds: Increase the amount in the account.   
- View Balance: Shows the amount in the account right now.   
Send E-Transfer: Use a security question and answer to send money to another user.

Accept E-Transfer: To accept pending transfers, confirm a security response.

- Modify PIN: Safely update the PIN.

- Exit: Quit the program politely.

3. Data Persistence: - To ensure session continuity, user information, account balances, and pending transfers are kept in a JSON file.

Error Handling: - Thorough input validation guarantees dependability and understandable error messages.

Implementation Technical:

- Classes: - User Class: Controls fundamental functions like `authenticate` and `withdraw` as well as user attributes like balance and PIN.

The ETransfer Class: manages sending and receiving transfers as well as other e-transfer operations.

The central application logic that controls user data, transactions, and interactions is known as the BankingApp Class.

Modules:

The application entry point is `app.js`.

The `User` class is defined by `user.js`.

The `ETransfer` class is implemented by `etransfer.js`.

The application functionality is contained in `bankingApp.js`.

- `utils.js`: Input processing and validation utility routines.

Proof of the code working.

Authentication being successful.

A screen shot of a computer

Description automatically generated

Viewing the balance

A black background with white text

Description automatically generated

Adding deposit to account

A black background with white text

Description automatically generated

Withdrawing money from the account

A black background with white text

Description automatically generated

Sending money to another email

A screenshot of a computer

Description automatically generated

Pending e transfer

A black background with white text

Description automatically generated

Exiting the bank app

A screen shot of a computer

Description automatically generated