**Users**:

· Regular users and admins.

Each user must have:

1. Username - cannot be changed.
2. Password
3. Email
4. Phone number
5. Photo ------------🡪 COULD

Regular user must:

1. Have credit/debit cards.
2. Register/login
3. View their credit information
4. Transfer money between own credit/debit
5. Transfer money to other users
6. Confirm, deny or view their transactions.

Admins could:

1. Аuthorize regular users' registrations.
2. Deactivate access for users
3. Block accounts

The admin role comes with predefined log-in details where only the password can be amended (could).

**Credit/debit card:**

· Credit/debit card must have:

1. Number
2. Expiration date
3. Card holder
4. Check number (cvv).

· A user must be able:

1. Register multiple credit and or debit cards, from which to transfer funds to and from their account.

· Each card should: (frontend)

1. Have a personalized design

· Users should be able to:

1. Set up recurring transactions:

* When creating a transaction, the user has the option to select an interval of time on which the transaction is repeated automatically. Users have a page where they can view all their recurring transactions and cancel them.

1. Users should be notified if their transactions fail for some reason. -🡪 В кода, без датабаза?

· In addition to searching through all the application users:

1. A user could be able to create a contacts list.
2. A user can add another user to their contacts list.
3. They can also remove users from the list.

· When creating a transaction, a user should:

1. Be able to select a category for the transfer (Rent, Utilities, Eating out etc.).
2. They can add, edit, or delete them.
3. They should be able to see reports for each category for a certain period.

Public Part

Accessible without authentication i.e., for anonymous users.

· Anonymous users must:

1. Be able to register and login.
2. Username must be unique and between 2 and 20 symbols.
3. Password must be at least 8 symbols and should contain capital letter, digit, and special symbol (+, -, \*, &, ^, …).
4. Email must be valid email and unique in the system.
5. Phone number must be 10 digits and unique in the system.
6. Anonymous users must see detailed information about Virtual Wallet and its features.

**Endpoints for registered users**

Accessible only if the user is authenticated.

1. Users must be able to login/logout.
2. Users must be able to view and update their profile (except the username).
3. If logged as a regular user, they would be able to review their account and credit/debit cards, category list, contact list and transaction history for their account. (info page) (must)
4. Users must be able to register/delete a credit/debit card.
5. Card number must be unique and with 16 digits.
6. Card holder must be between 2 and 30 symbols.
7. Check number must be 3 digits.
8. Users could be able to create and add other users to their contacts list.
9. Users could be able to search through their contacts list.
10. Мust be able to transfer money to other accounts.
11. Users can search by phone number, username, or email to select the recipient user for the transfer, but when viewing recipient users only username must be displayed.
12. Users should be able to make recurring transactions and access a list with all the recurring transactions.
13. Users should be able to create categories and to link different transactions to these categories.
14. Each transfer must go through confirmation step which displays the transfer details and allows either confirming it or editing it.
15. The receiver of the money must be able to accept or decline the transaction.
16. Users should be able to view a list of their transactions filtered by period, recipient, and direction (incoming or outgoing) and sort them by amount and date.
17. Transaction list should support pagination.

Administrative part

Accessible to users with administrative privileges.

1. Admin users could be able to approve registrations for regular users (via email).
2. Admin users could be able to see the list of all users.
3. Could be able to search them by phone number, username or email and block or unblock them. A blocked user must be able to do everything as a normal user, except to make transactions.
4. User list should support pagination.
5. Admin users could be able to view a list of all user transactions filtered by period, sender, recipient, and direction (incoming or outgoing).
6. And could be able to sort them by amount and date.
7. Transaction list should support pagination.
8. Admin users could be able to deny pending transactions.