Requirements For Stellar Cross Border Payment Platform

1. Workflow

You may also find this diagram: <u>How user-to-user cross-border payments work on Stellar</u> quite helpful, as Stellar stack works best for cross border payments between consumers or businesses.

However, this scenario helps understand the clear workflow of a stellar platform in crossborder payments. For the scope of this project, we will consider Deposit and withdraw flow based on manual transactions approved by the admin of the application. As below:

Deposit and withdraw flow based on manual transactions approved by the admin of the application

Considering we are USD anchor and USD asset is deployed on a stellar server, all the assets are residing in the admin stellar account .

Deposit flow (same as buying stellar USD asset):-

User login to the application and now he wants to deposit USD assets to his stellar account associated with the application.

For Example, if he wants to deposit 1000 USD stellar asset to his account then he will initiate the bank transaction of 1000 USD to the anchor's bank account provided details on the platform or application.

After performing the bank transaction user will submit the transaction details to the application admin will verify the transaction based on the bank and transaction details provided by the user.

After verifying the transaction details by the anchor/admin, the admin will approve the request and deposit request processed successfully.

On the behalf of the verified bank transaction, the admin user will receive 1000 stellar blockchain USD assets in his account.

Withdraw flow:

If the user wants to withdraw the stellar USD asset to his bank account then he will raise a withdrawal request from the application interface and submit his bank details to the anchor/admin of the application on the platform UI provided to the application.

Admin/ anchor will verify the withdrawal request based on activities performed by the user on the platform and he will verify the request from the admin panel.

After approval of the request transaction will be manually performed from the bank account of the admin to the user's bank account and transaction details will be sent on the registered user's bank account with a confirmation email - the transaction amount should be sent to the Bank Account and email listed in the user or business profile.

2. Requirements

We need to create a payment system using Stellar Blockchain technology and will consist of the following steps:

- Setting up the anchor and all related components.
- Setting up of a user panel and admin panel for the payment system.
- Testing transactions in this payment system properly using the tokens client has suggested.

Stellar Blockchain development use cases: -

- 1. Create Ledger/Assets
- 2. Create Account
- 3. Send Payment
- 4. Receive Payment
- 5. Follow Received Payments
- 6. Handling Errors
- 7. List all transactions
- 8. Smart Contract Management
- 9. Token Management
- 10. Stellar distribution exchange
- 11. Asset deployment
- 12. Anchor setup
- 13. Backend application that will interact with anchor and allow the user to perform the operation associated with stellar anchor.
- 14. Frontend application on the top of backend application for user interaction
- 15. Stellar core/Horizon server setup based on operation and runtime requirements or demand.
- 16. KYC integration based on 3rd party KYC AML verifier and service provider.
- 17. Admin panel to configure the settings of the application.

3. Key Components

The key components in this payment system would be:

- 1. Stellar Anchor system
- 2. User Dashboard Features
- 3. Admin Features
- 4. Cross border Payment transaction Fiat to Fiat (example USD to EUR)

4. External APIs

Following are the 3rd part APIs to be used in the system

- 1. Stellar Horizon Server (APIs)/ Stellar core services.
- 2. Stellar SDKs for setup of Anchor and related components.
- 3. KYC/ AML provider

6. Deliverables

Following will be the deliverables.

- 1. Payment system- Making and receiving payments
- 2. Stellar Anchor system
- 3. User Panel
- 4. Admin Panel
- 5. Source Code

6. Architecture Diagram

7. Helpful Resources

- Additionally, to get an understanding of how to create accounts and issue your own assets, I would also recommend that your tech team dive into the <u>Stellar Laboratory</u> and this <u>Developer</u> <u>Documentation</u> - specifically those around <u>issuing assets</u> and <u>enabling cross-border payments</u>.
- Stellar Keybase get help from others that have built their projects on Stellar.
- <u>Stellar Stack Exchange</u> The best place to go if you have technical questions. It's quite possible that someone has asked the same questions before, so I'd suggest first looking it up on Stellar's Stack Exchange channel before asking.