**Admin Use Case**

**Merchant Request Approval**

In order to receive service from DUPay, the merchant candidate sends request to admin with the required documents. Admin verifies documents and can accept/reject the registration request of merchant candidate. The registration requests will be available on a dashboard. Pending requests will remain at the top. Upon selecting a particular request, admin can view required documents corresponding to that request.

**Viewing All Registered Merchants and Their Details**

Admin can view the list of registered merchants of DUPay. She/he can view details of particular merchants upon selection.

**Notifying Merchant with Description**

In order to inform merchant of something, admin can create a custom notification and send it to that merchant. Merchants can view this notification from her/his dashboard, after logging into the system.

**Processing Transfer Request**

Merchants can transfer requests to admin for paying some utility bill. Before forwarding the request to admin, system checks whether the intended amount is available in the account of the merchant.

Admin can view transfer requests on a dashboard. Transfer requests have three statuses: pending, approved and complete.

After request is delivered to admin, its status is pending. When admin approves a request of merchant, the admin will change status to approve. When admin complete payment of utility bill to the intended organization (DESCO, TITAS etc.), the admin will manually change the status to complete.

When status is updated to ‘complete’ the sum of money is deducted from the merchant's account.

**Viewing of transaction and report**

Admin will be able to view all transactions that take place in the system. Admin can query merchants based on their user IDs. Also admin can query transactions with transaction ID.

DUPay provides admin with facilities to generate reports based on integrated wallets of DUPay, total amount of money present in wallets, monthly transaction.

**Merchant Use Cases**

**Registration**

At first, the user will be asked to enter her/his email. An OTP will be sent to the provided email. Then, the system will ask the user to enter the OTP. If the entered OTP matches with the sent OTP, then the user will be asked to enter other required information (name, NID, trade license of business ,email and password). A ‘merchant account creation’ request will be forwarded to admin of DUPay.

Containing the above information. The admin will check the information and will accept/ reject the request.

**Login**

The user will be asked to enter the username and password. If credentials are correct, the user will gain access to the system. S/he will be able to view transaction reports and account status.

**SDK Download**

After registration, the user will be given an SDK. The provided SDK will handle all activities performed by the gateway. The SDK needs to be integrated with the merchants website in order to receive services from DUPAY.

**Sending Transfer request**

Merchant can view her/his own profile after signing in. Profile contains information of transactions and (logical) balance.

If a merchant wants to withdraw money from DUPay, merchant will have to initiate a transfer request.

At the time of transfer request, the amount of money to be transformed and bank account information needs to be provided. Bank account information includes name of bank, branch of bank, name of account, account ID.

If merchant wants to withdraw money from DUPay and deposit it to any mobile wallet, then the wallet specified number needs to be provided.

After providing information and initiating a request, the system will ask the merchant to enter her/his password. If password has been entered correctly, request will be proceeded to the admin and status of transfer request would be updated to ‘pending’.

Admin can update the status of the transfer request.

When admin approves of the transfer request, status will be updated to 'approved’ and notification will be sent to user.

When admin updates status of ‘complete’ after s/he pays the money to the specified bank account, merchant will be given a notification.

**Viewing of Transaction Query**

The merchant will be able to view a dashboard after logging in. The dashboard will contain all transaction history corresponding to her/his account. The merchant can also make queries based on certain criteria on the transaction history. Criteria are transaction ID and date range.

If merchant makes query of transaction ID that does not belong to him/her, the transaction ID will not be made available to him/her.

**Viewing Notification from Dashboard**

The merchant will be able to view notifications from the admin on her/his dashboard.

**Viewing of Transfer Request History**

The merchant will be able to view all transfer requests made to admin from her/his dashboard.

**Anonymous User Story**

Merchant integrates SDK into her/his website. When an anonymous user wants to make payment to user, the website will redirect the user to DUPay. At the time of redirecting, the website will provide DUPay with the bill ID and amount. DUPay provides users with the interface through which the user can select a wallet service and complete the payment procedure. When payment is completed, DUPay will send the payment confirmation message to the website.

## Action Reply

**Admin User-Case:**

Action/Reply

**Merchant Request Approval:**

Action : Merchant sends request with required document.

Reply : Admin verifies request.

Action : Admin approves/rejects request.

Reply : Merchant status is updated.

**See registered Merchant and Their Details**

Action : Admin requests list of registered merchant.

Reply : List is shown in a dashboard.

Action : Admin selects a particular merchant.

Reply : Details is shown in dashboard.

**Notify Merchant With Description :**

Action : Admin creates custom notification and send it to merchant.

Reply : Merchant views notification from the dashboard.

**Processing Transfer Request :**

Action : Merchant requests to admin for utility bill payment.

Reply : System checks if the intended amount is available.

Action : System forwards request to admin.

Reply : Admin views the transfer requests on a dashboard.

Action : Admin approves request.

Reply: Request status is updated.

Action : Admin completes payment of utility bills.

Reply : Admin changes the status to “Complete”.

Reply : Sum of money is deducted from merchants account.

**Viewing of Transaction & Reports:**

Action : Admin views transactions.

Reply : All transactions are shown in the dashboard.

Action : Admin queries merchant based on their user ID/transaction ID.

Reply : Requested queries are shown.

Action : Admin requests to generate particular reports.

Reply : System generates corresponding reports.

**Merchant Use Cases:**

**Action/Reply**

**Registration**

Action : User enters email.

Reply : An OTP is sent to the email.

Action : User enters the sent OTP.

Reply : System matches sent OTP and entered OTP.

Action : User enters required information(name,NID,trade license of business,email and password).

Reply : A ‘Merchant Account Creation’ request is forwarded to admin.

Action : Admin verifies the information.

Reply : Admin accepts/rejects the request.

**Login**

**Action :** User enters username and password.

Reply : System verifies the info.

Action : User logs into the system.

Reply : User views transaction reports and account status.

**SDK Download:**

Action : User is given an SDK.

Reply : User downloads the SDK and SDK is integrated in the merchant’s website.

**Sending Transfer Requests**

Action : User signs into the system.

Reply : System shows user profile containing information of transactions and logical balance.

Action : Merchant initiates a transfer request with necessary credentials.

Reply : A transfer request is generated

Action : Customer wants to withdraw money and deposit it into any mobile wallet with specified number.

Reply : Corresponding transfer request is generated.

Action : User enters password.

Reply : Transfer request is sent to the admin and status is updated to ‘Pending’ request.

Reply : Status is updated to ‘Approve’ and notification is sent to the user.

Action : Admin updates status to ‘Complete’.

Reply : User is given a notification.

**View of Transaction Query :**

Action : User makes queries based on transaction ID and date range.

Reply : Requested queries are shown.

Action : User makes query of transaction ID that does not belong to him/ her.

Reply : Request queries are not shown.

**View Notification from Dashboard**

Action : <erchants views notifications.

Reply : Notifications are shown in dashboard.

**View of Transfer Request History**

Action : Merchant views transfer requests.

Reply : Requests are shown in the dashboard.