Module 1 – Authentication and Verification

User Module

- Splash Screen –

  Before getting into the application, a splash screen with the app logo and name will appear for a few seconds, after that registration option will appear.

- Registration–

This section will allow users to create their account on the app to create their account on the app.

- Sign Up via Contact Number:-

Step 1: The user will sign up for the application by filling in some details such as:

- Profile Picture
- First Name*
- Last Name*
- Mobile Number along with country code (Dropdown Country List)*(The number should be the same as the one provided in the Bank)
- Email Address*
- Password*
- Re-enter password*
- Agree Terms & Conditions* (Checkbox)
- Submit (Button)

After filling in all the details & tapping on the submit button, the user will proceed for verification.

Step 2:- OTP Verification - In verification, Users will get the OTP code at their mobile number entered at the time of registration., Users will be redirected to the OTP verification page where they will see the following options:-

- Enter OTP (Textbox)
- Submit (Button)

- Resend OTP (Link) - If OTP is not received, then the user will tap on the link to get the OTP again.

- KYC verification:-

  The user will have to enter the following details in the process:

  - Upload National ID Proof*

    The user will be promoted to give Gallery and camera access.

    - Upload photo from Gallery
    - Take a photo

  - Bank Details(Not mandatory at this step)

    - Bank Name
    - Branch Address
    - IFSC code
    - Account holder name
    - Submit(Button)

OTP Verification - In verification, the User will get the OTP code at their mobile number entered at the time of registration. This OTP verification is for ID proof validation and bank account validation. Users will be redirected to the OTP verification page where they will see the following options:-

- Enter OTP (Textbox)
- Submit (Button)
- Resend OTP (Link) - If OTP is not received, then the user will tap on the link to get the OTP again.

- Sign IN:-

If the user has already an Existing account, then they can able to sign in, with the following details such as:-

- Email ID/Mobile Number
- Password

- Submit (Button)
- *Forget Password (Link)*

- Forgot Password:-

Users will have the option to regain credentials by entering the registered mobile Number. If they enter the correct number, then they will get the OTP code at their mobile number & after entering the correct OTP on appear screen, the users will be able to reset their password after entering the following:-

- New password
- Re-enter Password
- Submit (Button)

Agent Module

- Splash Screen –

Before getting into the application, a splash screen with the app logo and name will appear for a few seconds, after that registration option will appear.

- Registration–

This section will allow agents to create their account on the app to create their accounts on the app.

- Sign Up via Contact Number:-

Step 1:- The agent will sign up for the application by filling in some details such as:

- Profile Picture
- First Name*
- Last Name*
- Mobile Number along with country code (Dropdown Country List)*(The number should be the same as the one provided in Bank)
- Email Address*
- Password*
- Re-enter password*
- Agree Terms & Conditions* (Checkbox)

- Submit (Button)

After filling in all the details & tapping on the submit button, the agent will proceed for verification.

Step 2:- OTP Verification - In verification, the agent will get the OTP code at their mobile number entered at the time of registration. The agent will be redirected to the OTP verification page where they will see the following options:-

- Enter OTP (Textbox)
- Submit (Button)
- Resend OTP (Link) - If OTP is not received, then the agent will tap on the link to get the OTP again.

- KYC verification:-

The agent will have to enter the following details in the process:

- Upload National ID Proof*

  The agent will be promoted to give Gallery and camera access.

  - Upload photo from Gallery
  - Take a photo
- Bank Details(Mandatory at this step)
  - Bank Name
  - Branch Address
  - IFSC code
  - Account holder name
  - Submit(Button)

OTP Verification - In verification, the agent will get the OTP code at their mobile number entered at the time of registration. This OTP verification is for ID proof validation and bank account validation. The agent will be redirected to the OTP verification page where they will see the following options:-

- Enter OTP (Textbox)

- Submit (Button)
  - Resend OTP (Link) - If OTP is not received, then the agent will tap on the link to get the OTP again.

Note: Once this is done, the agent account will go into verification, and, will take 24-48 hours to verify the account. The admin team will review all the details and verify the account. After verification, the agent account will be active to use.

- Sign IN:-

  If the agent has an existing account, then they can able to sign in, with the following details such as:-

  - Email ID/Mobile Number
  - Password
  - Submit (Button)
  - *Forget Password (Link)*

- Forgot Password:-
  Users will have the option to regain credentials by entering the Registered mobile Number. If they enter the correct number, then they will get the OTP code at their mobile number & after entering the correct OTP on appear screen, the users will be able to reset their password after entering the following:-

  - New password
  - Re-enter Password
  - Submit (Button)

The agent will have the access to mark active/inactive on the dashboard based on his/her availability.

Admin Panel

- Sign In:-

  Admin will sign in with the following details:

  - Email ID/Mobile Number
  - Password

***After that, the admin will proceed.*

- Password Recovery:-

  Admin will regain his credentials after clicking on the “Forgot Password” option; he will receive a Link on his registered Email ID after that admin will reset his Password.

Module 2 - Add Money To Buy Coins

User Module

Make A Deposit:

Case 1: If the user wants to deposit through the app;

- Location

  Users will allow location access. The current location will be fetched through the device.

- Pay through Bank
  - o Choose existing account
  - o Add a new account
    - Bank Name
    - Branch Address
    - IFSC code
    - Account holder name
    - Submit(Button)

  Once the user adds a new account, the user will receive an OTP on the registered mobile number in the bank account and will have to verify the account.

  **The user will be then redirected to the payment gateway and the user will authenticate the payment via the payment gateway.

- Pay through Mobile Money
  - o Airtel Money
  - o Enter User ID

    (NOTE: Payment gateways will be added as they become available as per discussion with the client).

    The app will redirect the user to the payment page with the amount auto-filled in the payment screen of Airtel money. Users will have to approve the payment.

    Once the user makes the payment, the app will mark the transaction as complete.

  **The app will display the value in the Total Deposit section once the transaction is complete.

Case 2: If the user wants to deposit through the bank;

- Location

  Users will allow location access. The current location will be fetched through the device.

- The user will fill out the form with the following details:

- Upload bank receipt
- Enter deposit amount
- Enter the date and time of the transaction
- Submit(Button)

**The app will display that the transaction is under verification.

**If the admin approves the transaction, the app will display the deposit value in the total deposit section on the user app.

**If canceled by the admin, the user will get the notification and the reason for cancellation.

Case 3: If the user wants to deposit through the agent;

The user will have the option to find the nearby agent through the app from the Locate Agent section. The steps are as follows:

- Locate Agent
- Allow live location or enter the location manually
- Search(Button)

** This will provide the list of all the agents nearby and a button with the option to navigate to the agent location through Maps.

**Once the user locates the agent, the user will pay the agent in cash and the agent will update the amount under the user ID. The amount will take some time to reflect in the app. The user can then make investments, transfer or bill payment in the app using the money.

**The app will display that the transaction is complete.

Note: The transactions in the user panel will come with a tag as to how the money was added to the account. The tag will be listed as:

- **By Bank Deposit**

- **By Agent**
- **By Airtel money**
- **By Internet banking**

Admin Panel

Make A Deposit:

The agent will be able to add money to any user account once the user pay the agent in cash through the following steps:

- Add Money to User account (Button)
    - User ID
    - Mobile number
    - Name
    - Amount
    - Payment mode by user
    - Upload user National ID
    - Upload user photo
    - Confirm if amount is collected from the user(Check box)
    - Add currency (For ex: 200*10, 100*5)
    - Verify
    - Enter agent ID
    - Confirm

****Once the agent hits confirm the payment will be transferred from agents account to the user account. For the same, the agent will have to add credits to his account before the transaction.**

Module 3 - Coin Transfer/Money Transfer

User Module

This module allows users to transfer TCC coins from one user account to another user account which can be used within the app or the users can withdraw the same. The flow of the module will be as follows:

- Transfer Credit
    - Enter your Mobile Number(the number should be the same as the one used to register on the app). The app will fetch the profile picture and other details from the entered details.
    - Select amount (Cannot be greater than available amount)
    - Transfer (Button)
      To transfer, a verification OTP will be sent to the mobile number of the payee.
        - OTP verification
        - Confirm
          Once confirmed, the credit will be transferred to the user whose mobile number was added.

**If the recipient is not on the TCC app, the payee can make a transfer to the agent, and the recipient can visit the agent and collect the payment. The flow of the same will be as follows:

- Select a nearby agent (near the recipient's address)(we will populate data based on the agents nearby)

  Once selected, the user will fill in the transfer amount. After that, the user will see a form with the following details:

    - Receiver's name
    - Mobile number
    - Email
    - National ID (The receiver will have to carry this with themselves while collecting funds from the agent for verification)
      **they can either upload or enter the national ID code.
    - Transfer(Button)
      This will allow the payee to proceed to verification and make the transfer successful.

**This will send a code to the recipient mobile number and email for them to collect the amount.

**The user will see the transaction as processing and a request will be sent to the agent to accept the payment order if they want to complete the payment or if they can make that payment.

**The user will see the status of the transaction as ongoing if the agent takes the payment order and once it is collected from the agent, the payment will be marked successful.

**If the payee doesn't want to make the payment through the app(if they have cash), they can locate an agent nearby and provide the cash to the agent and the agent will make the payment on behalf of the user through the agent account. The flow of the same will be as follows:

- Recipient User ID
- Mobile number
- Name
- Amount
- Payment mode by user
- Upload payee National ID
- Upload payee photo
- Confirm if amount is collected from the user(Check box)
- Add currency (For ex: 200*10, 100*5)
- Verify
- Enter agent ID
- Confirm

****After this the agent will make the transfer to the recipient and will issue a payment slip manually to the payee.**

Agent Panel

Payment Transfer Request: In case of payee making and online transfer to agent and recipient collects the payment in cash

The payment orders generated by the be displayed to the agent in the payment orders section.

The agent can either accept or reject the order depending on availability of the agent and the cash value of the transaction.

- If approved: The order will move to in process and 'Ready to pay' button will be displayed. The recipient can visit the agent and client cash by showing the National ID. The flow of the same will be as followed:
  - On click of Ready to pay to agent will have to enter the following data:
    - Recipient name
    - Mobile number

- National ID
- Upload photo
- Share the code
- Confirm

  The system will verify the details with the details entered by the payee while making a deposit manually or through the app. If the details match, the payment will be successful, else it will show the reason for failure. The agent can retry once again and if this still doesn't work, the amount will be reverted back to the payee account.

Module 4 - Bill Payment

User Module

This module allows the user to pay different type of bills like:

- Water Bill

  The user will be able to fill in details like:

  - Bill ID
  - Name on bill
  - Choose Payment Method
    - Pay through Bank
      - Choose existing account
      - Add a new account
        - Bank Name
        - Branch Address
        - IFSC code
        - Account holder name
        - Submit(Button)

Once the user adds a new account, the user will receive an OTP on the registered mobile number in the bank account and will have to verify the account.

**The user will be then redirected to the payment gateway and the user will make the payment of the due amount.

- Pay through Mobile Money
  - Airtel Money

The app will redirect the user to the payment page with the amount auto-filled in the payment screen of Airtel money. Users will have to approve the payment.

Once the user makes the payment, the app will mark the transaction complete.

- Electricity Bill
- DSTV
- Others

*Once the payment is done, transaction ID will be generated.

Module 5 – Homepage Functionality

User Module

The user will land on the home screen after the verification process and will see options like: Live Currency Exchange rate,Agriculture, Education and Minerals Portfolio: Total Deposit, Make a deposit.

Select Investment plan:

Live Currency Exchange Rate and Graph

The user will be able to see the exchange rate graph of USD and will have a currency converter which will show the value of 1 USD in Sierra Leonean Leone.

Agriculture

The user will be able to see different options of investment in agriculture like:

- Land Lease
- Production
- Processing
- Marketing

Next, the user will select the tenure for which they want to invest. Based on the above selection, users will be able to see the return and further make the decision on investment.

Education

The user will be able to see different options of investment in education like:

- Institution
- Housing/Dormitory

Next, the user will select the tenure for which they want to invest. Based on the above selection, users will be able to see the return and further make the decision on investment.

Minerals

The user will be able to see different options of investment in education like:

- Gold
- Platinum
- Silver etc.

Next, the user will select the tenure for which they want to invest. Based on the above selection, users will be able to see the return and further make the decision on investment.

Make A Deposit:

Case 1: If the user wants to make the deposit through the app;

- **Location**

  Users will allow location access. Current location will be fetched through the device.

- The user will fill the form with the following details:

  - Amount to be deposited
  - Select tenure for deposit (The tenure and the returns on the tenure will be decided by the admin)
  - View Agreement
  - Accept Agreement(Check mark)
  - Submit(Button)

- Once done, the user will have the following option:

  - **Pay through Bank**
    - Choose existing account
    - Add a new account
      - Bank Name
      - Branch Address
      - IFSC code
      - Account holder name
      - Submit(Button)

    Once the user adds a new account, the user will receive an OTP on the registered mobile number in the bank account and will have to verify the account.

    **The user will be then redirected to the payment gateway and the user will authenticate the payment.

  - **Pay through Mobile Money**
    - Airtel Money
    - Enter User ID (

NOTE: Payment gateways will be added as they become available with discussion with the client).

The app will redirect the user to the payment page with the amount auto-filled in the payment screen of Airtel money. Users will have to approve the payment.

Once the user makes the payment, the app will mark the transaction complete.

****The app will display the value in the Total deposit section once the transaction is complete.**

Case 2: If the user wants to make the deposit through the bank;

- **Location**

  Users will allow location access. Current location will be fetched through the device.

- The user will fill the form with the following details:

- Upload bank receipt
- Enter deposit amount
- Enter date and time of transaction
- Select tenure for deposit(Return of the tenure will be decided by the admin)
- View Agreement
- Accept Agreement(Check mark)
- Submit(Button)

Module 6 - User Portfolio: Total Deposit Section

User Module

Portfolio: Total Deposit:

The user will be able to see the total deposit value in the original currency. If there are multiple transactions with different time of deposit, the user will get the list with the following details:

- Deposit 1
    - Total amount deposited and its value based on the date and time of investment
    - Deposit Tenure
    - Expected Return
    - Withdraw Deposit(button)
    - Change Deposit Tenure(Button)
- Deposit 2
- Deposit 3

Change Deposit Tenure:

The user will be able to change the tenure of the deposit made. The procedure of changing would be as followed:

- Select tenure for deposit(Return of the tenure will be decided by the admin)
- View Agreement
- Accept Agreement(Check mark)
- Submit(Button)

****Once done, the value of the expected return would change based on the return rate of the tenure and the deposit amount.**

****The user will be able to see insured badge if they have purchased insurance of the deposits made.**

Withdraw Deposit Funds:

The user will be able withdraw the deposit made. The procedure of withdrawal would be as followed:

- Total Amount to be withdrawn(This will be autofilled which will be equal to the deposit value)

- Transfer to:
    - o Withdraw to bank(Checkbox)
    - o Withdraw to Mobile money(Checkbox)
- View Agreement
- Accept Agreement(Check mark)
- Submit(Button)

**Once done, the admin will approve or reject the transaction. On approval, the amount will be transferred to the chosen account and if rejected, the user will get the notification.

Agent Module

The dashboard on the agent panel will display the amount that they have deposited on the daily, weekly and monthly basis and the commission made.

The commission will be set by the admin during the account verification stage and the admin can manipulate the commission percentage at any point of time. The agent will be notified for any change in the commission percentage.

Module 7 - E-voting

User Module

This module enables the users to cast votes on the platform using the TCC coins. The flow of the module will be as followed:

- Cast Vote
  This will be a section in the app that will allow the users to see a list of open votings from which they can select in which voting they want to participate. Once they select, they will be redirected to the next screen where they can vote.
  - Open Elections
    This will have the list of all open votings. It will be like polls in LinkedIn or Whatsapp
    - Select open voting
    - Voting charges
    - Poll duration
    - Select answer
    - Mark vote
      Once the vote is done, it cannot be changed.
  - Closed Elections
    In this section, the user can see a list of all the polls he/she has participated in and the result of the same. It will also show how much money costs in the same.

Admin Panel

- Create New Poll
  - Enter Poll title
  - Question
  - Options
  - Set time (Cannot be left blank. This will decide when the poll ends automatically)
  - Confirm(Button)
    This will allow the admin to create a poll. Once done, the users will be able to see the new poll.

- Previous Poll
    - Download result
      This will allow the admin to see the list of users who have voted and whom they have voted for.
    - Total votes
    - Distribution by options
    - Revenue by poll
    - Actions
        - End poll (Admin can end the poll before time)
        - Modify poll (Only possible before any vote is casted)

Pause (This will not delete the poll or its data but the users will not be able to see this poll.)

Module 8 – KPI Graphs and Agreement Management

Admin Panel

- Agreement Management

  The admin will be able to update the agreement for the deposit tenure.

  The admin can do the following:

  - Set Tenure
    - Upload Agreement file (Upload button)
    - Submit(Button)
    - Delete(Button)

- Insurance Management
  The admin will be able to update the insurance policies of the investments.

  - Upload Insurance file (Upload button)
  - Submit(Button)
  - Delete(Button)

- **Change in Deposit Tenure Request**

  This section will display the deposit request for which the user wants to change the tenure.

  - User ID
  - Amount Deposited
  - Date and time of deposit
  - Previous Tenure
  - New Tenure
  - Approve/Reject(Button)
  - If the admin rejects the deposit, he/she will have to give a reason for rejection.

- **Withdrawal Request**

  This section will display the request for withdrawal of deposits

- User ID
- Amount Deposited
- Date and time of deposit
- Tenure
- Approve/Reject(Button)

If the admin rejects the deposit, he/she will have to give a reason for rejection.

**If the tenure is not complete, the user will receive the deposited amount and if the tenure is complete, the user will receive the amount plus the interest rate that needs to be paid by the admin.

Module 9 – Payment and verification management

Admin Module

Case 1: This section will cover payments related to Deposits

- Deposits through bank and Mobile Money

  This section will display the deposits within the app through bank accounts and Airtel money.

  - User ID
  - Amount Deposited
  - Date and time of deposit
  - Mode of payment
    - Bank transfer
    - Mobile Money

- Deposits through Bank Receipt

  This section will display the deposits made by the user bank accounts and uploading the bank receipt

  - User ID
  - Amount Deposited
  - Date and time of deposit
  - Bank Receipt
    - View bank Receipt
    - Verify details
    - Approve/Reject(Button)

      If the admin rejects the deposit, he/she will have to give a reason for rejection.

Case 2: This section will cover payments related to Bill Payment.

This section will display the transactions of the user made for bill payment

- User ID

- Transaction ID
- Bill ID
- Amount Paid
- Transaction Status

Case 3: This section will cover payments related to Money Transfer.

This section will display the transactions of the user made for bill payment

- Payee User ID
- Transaction ID
- Recipient User ID
- Amount Paid
- Transaction Status

Case 4: This section will cover payments done to the agent for money transfer..

This section will display the transactions of the user made for money transfer via agent..

- User ID
- Transaction ID
- Transferred to (Agent ID and details)
- Amount
- Receiver details
- Status
    - Ongoing
    - Completed

Module 10 – KPI Graphs

Admin Panel

- Dashboard

  Admin will see the following statistics such as:-

  - Total number of users.
  - Total Deposits
  - Total Bill Payments

  ***All information will be shown on a Weekly, Monthly & Yearly basis.*

- Report Management

  - View Report

  Admin can view the following reports such as:-

  - Total number of users.
  - Total Deposits
  - Total Bill Payments
    - *Action:-*
      - Export in CSV or Excel file
  - Sort

    Admin can sort the report based on the following field such as:-

    - Daily
    - Weekly
    - Monthly
    - Select Date Range
      - From
      - To

Module 8 – Add-on/Side Menus and Static Content

User Module

- Transaction History

  This section will display all the transactions in a list format with option to separate transaction based on mode and filter them.

- Support

In this section, Users can send an email on the given email id.

- Notifications

- Push Notifications

User will receive notification related to: -

- o Deposit confirmation
- o Bill Payment
- o Update/Announcement

***Users are able to enable or disable Push-Notifications.*

- Settings

- Profile Settings

User can View/Update their profile:-

- o Profile Picture
- o Full Name
- o Email ID
- o Address

- Static Content

User can view static content such as:-

- **o** Terms and Conditions (Static Text)
- o Privacy Policy

- App Settings

User will View/Manage the following: -

- Change Password
- Log Out

Agent Module

- Transaction History

  This section will display all the transactions in a list format with option to separate transactions based on mode and filter them.

- Support

In this section, Users can send an email on the given email id.

- Notifications

  - Push Notifications

Agent will receive notification related to: -

- Deposit confirmation
- Commission change
- Update/Announcement

- Settings

  - Profile Settings

Agent can View/Update their profile:-

- Profile Picture
- Full Name
- Email ID
- Address

  - Static Content

Agent can view static content such as:-

- Terms and Conditions (Static Text)
- Privacy Policy

  - App Settings

Agent will View/Manage the following: -

- Change Password
- Log Out

Admin Panel

- Notifications
  - Receive Notifications

Admin will receive notifications related to:-

- New Verification Requests
- Withdrawal related
- Others(To be decided during development)

- Send Notifications

Admin will be able to send the notification to users for any update or announcements.

- Settings
  - Account Settings

Admin will edit the Account details:

- Change Password
- Log Out

- CMS Management

Admin will manage the static content such as:-

- Terms and Conditions
- Privacy Policy