

# BLOCKCHAIN

## Requirement Statement

Xbank is the third largest bank in US geography. They have operation across the globe. Xbank wants to set up a platform to enhance their cross border transactions, faster loan disbursement for home, two-wheeler, four-wheeler and commercial vehicles, retirement benefit program and government welfare schemes.

Inputs:

- Other banks apart from Xbank, Regulators, eligible customer, shipping company, transporters, and government agencies can use the platform
- The platform should have at least three participant/stakeholder with their own set up
- Platform store the same set of data across the participants
- Any participant/stakeholder can join at any point of time
- Each participant/stakeholder has equal rights and accountable for any transactions in the platform

**Considerations:**

- Make the existing process simpler and faster
- Stop paper and manual process
- Each stakeholder has the visibility and participation in the transaction
- The records are only committed only after meeting certain percentage of approval out of the total stakeholders
- Track any transaction records across the stakeholders for any audit and regulatory process
- Remove any intermediary in the process

**Solution Requirement:**

Provide a platform solution with the following key task for each Business operation. In the market, Blockchain platforms like Hyperledger Fabric, Hyperledger Sawtooth, Quorum, R3 Corda, Chain, Ethereum, etc. are available. Choose any one of the platform as per your choice.

Solution should have the following steps:

- Design network
- Define the participants
- Create the network
- Define the role of the participant
- Build the smart contract using your preferred language or the language supported on the platform
- Deploy the smart contract
- Initiate a business transaction

**Tasks:**

Following are few steps for any business transaction. If required, any steps can be included to be part of any business process apart from the steps given below.

1. Initiate a request
2. Request flow to different participants only as per the stakeholder matrix
3. Request approval process
4. Loan Disbursal/Scheme Initiation/Scheme closure

Sl#	Business Operation	Stakeholders
1	Cross Border Transaction	Banks, Supplier, Receiver, Transporter, Regulator
2	Home Loans	Bank, Customer, Registration Department, Insurance providers, Regulator and any other Government agencies
3	Two/Four Wheeler Loans	Bank, Dealers, Customer, Motor Vehicle Department, Insurance providers
4	Commercial Vehicle Loans	Bank, Dealers, Customer, Motor Vehicle Department, Insurance providers, Government agencies
5	Retirement Benefits program	Bank, Customer, Employers, Insurance providers, Regulator and any other Government agencies
6	Government welfare schemes	Bank, Customer, Supplier, Insurance providers, Regulator and any other Government agencies

**Notes:**

1. For InfraMind phase 2, provide the technical solution along with the overall architecture, hosting consideration, provide working solution along with the demo of the functionality of the solution
2. Use any platform, deployment management tools, SDKs from any provider in your code for the automation solution or CLI or any other method

**POINTS TO REMEMBER**

The below listed will be the upcoming events/ process next week onwards for Inframind Season 3 Round 2:

- For each tower, there will be a webinar session organized with the TCS SMEs to help you further understand the problem statement. the Webinar announcements/links will be shared via emails ,Campus commune channels and text messages.
- For further more details regarding Inframind Season 3, students can visit the “Inframind Season 3 “and “IT Infrastructure Services - Powering IT Infrastructure Globally - Be the Future!” channels on Campus Commune.
- Pls utilize the webinars to help enhance your understanding of the case study; your queries will also be addressed on this platform. Mentors will be assigned to you as required during these Webinars .