Create a Google Cloud Platform (GCP) account if you don't already have one.

Create a new project in the GCP Console and enable the necessary APIs, such as the Cloud Pub/Sub API and the BigQuery API.

Set up a BigQuery dataset and table to store account details. You can use the following schema for the table:

vbnet

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AccountID: STRING

BankName: STRING

AccountNumber: STRING

IFSCCode: STRING

Insert the bank details of each account into the BigQuery table.

Create a separate table to store the hash values for each AccountID. You can use the following schema for the table:

vbnet

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AccountID: STRING

HashValue: STRING

Write a script to calculate the hash value for each AccountID and insert it into the hash table. You can use a SHA-256 hash function for this purpose. Here's some sample Python code:

python

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import hashlib

# Get the list of AccountIDs from the account details table

account\_ids = ...

# Calculate the hash value for each AccountID

for account\_id in account\_ids:

hash\_value = hashlib.sha256(account\_id.encode('utf-8')).hexdigest()

# Insert the hash value into the hash table

...

Write a web application or a mobile application to initiate transactions. When a sender initiates a transaction, the application should request the AccountID of the receiver and the transaction amount.

Use the hash table to retrieve the hash value for the AccountID provided by the sender. Send the hash value and the transaction amount to the central bank's escrow service, along with the sender's UPI ID.

The escrow service verifies the hash value and holds the money until the conditions specified in the smart contract are met.

When the conditions are met, the escrow service releases the money to the receiver's bank account, and sends a notification to both the sender and the receiver using the Pub/Sub service.

This mechanism ensures that sensitive bank details are not exchanged during a transaction and are kept confidential. The hash function provides a secure way to verify the authenticity of the AccountID without revealing the actual bank details. The Pub/Sub service provides a reliable way to notify the sender and receiver about the transaction.