# Asiatic Accounts System

- □Use Case Diagram
- □Use Case Narrative
- □E-R Diagram
- □Database Table Schema

#### Group #1

#0205002 #0205003 #0205004 #0205014 #0205026 #9705065

#### Actors

- Company Owner
- System Administrator
- Company Administrator
- Planning stuff
- Accounting stuff
- ☐ Finance Officer
- Auditor Client and Govt.

Use Case	Actor
Create Company	System Administrator
Modify Company	Company administrator
Create Client	System administrator, Company administrator
Modify Client	System administrator, Company administrator
Create User	Company administrator
Modify User	Company administrator

Use Case	Actor
Create Account	Company Administrator, Privileged users
View Account	Company Administrator, Privileged users
Modify Account	Company Administrator, Privileged users
Close Account	Company Administrator, Privileged users

Use Case	Actor
Reopen Account	Company Administrator, Privileged users
Create Implementation Brief	Planning stuffs
Create Bill	Planning Stuffs
Create Bank Payment Voucher	Accounting Stuffs

Use Case	Actor
Create Cash Payment Voucher	Accounting Stuffs
Create Bank Receive Voucher	Accounting stuffs
Create Cash Receive Voucher	Accounting Stuffs
Create Journal Voucher	Accounting Stuffs

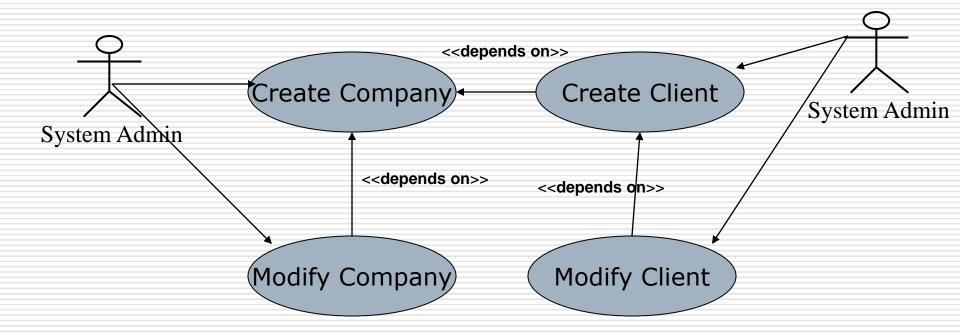
Use Case	Actor
Delete Voucher	Company Administrator & Accounting Stuffs
Modify Voucher	Company Administrator & Accounting Stuffs
View Deleted Voucher	Company Administrator & Accounting Stuffs
View Modified Voucher	Company Administrator & Accounting Stuffs

Use Case	Actor
View Voucher	Company Administrator & Accounting Stuffs
Reconcile BP Vouchers	Company Administrator, Privileged users
Reconcile BR Vouchers	Company Administrator, Privileged users.
Post Voucher	Company Administrator, Privileged users.

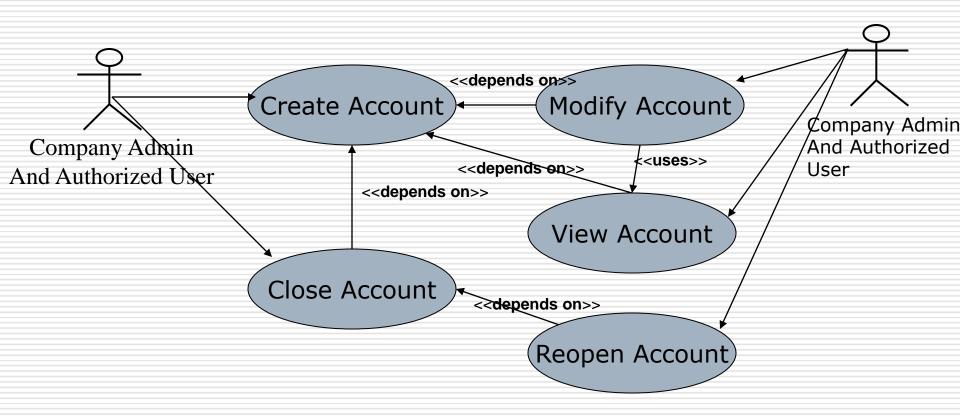
Use Case	Actor
Closing Accounting Year	Company Administrator
Print Voucher Register	Authorized users
Print Voucher	Authorized users
Print General Ledger	Authorized users
Print Cash Book	Authorized Users
Print Trial Balance	Authorized users

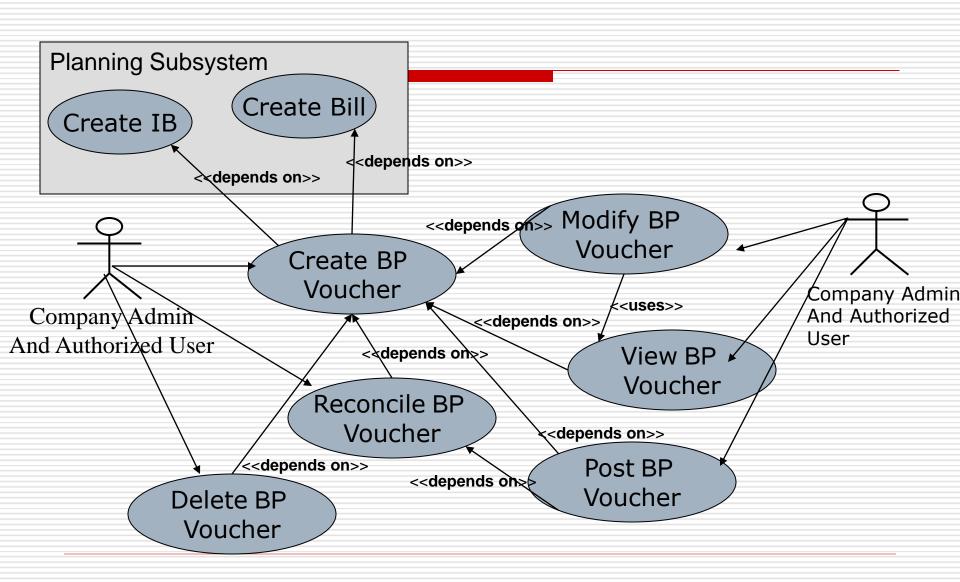
Use Case	Actor
Create Client wise Reports	Authorized users
Print General Ledger	Authorized users
Print Cash Book	Authorized Users
Print Trial Balance	Authorized users

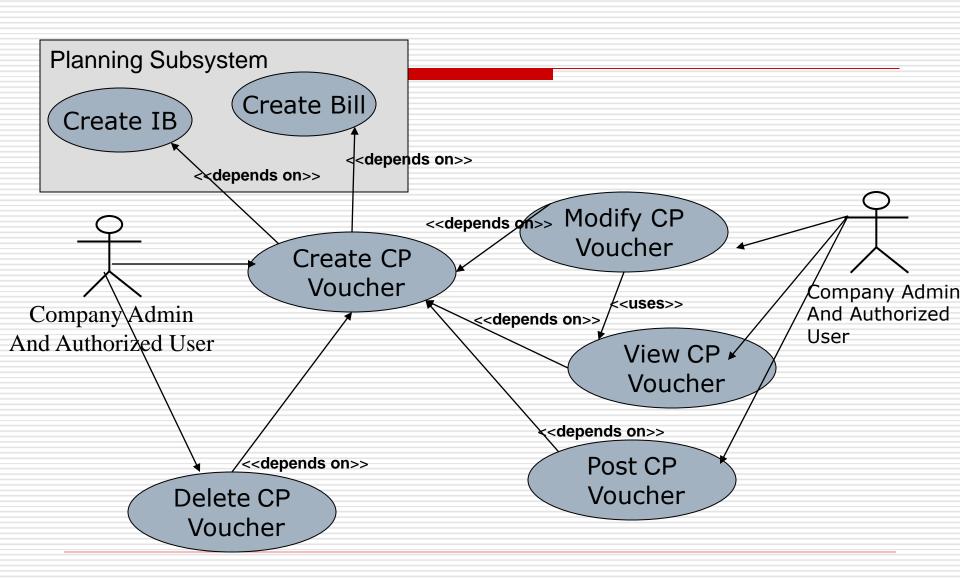
#### Company and Client Management Subsystem

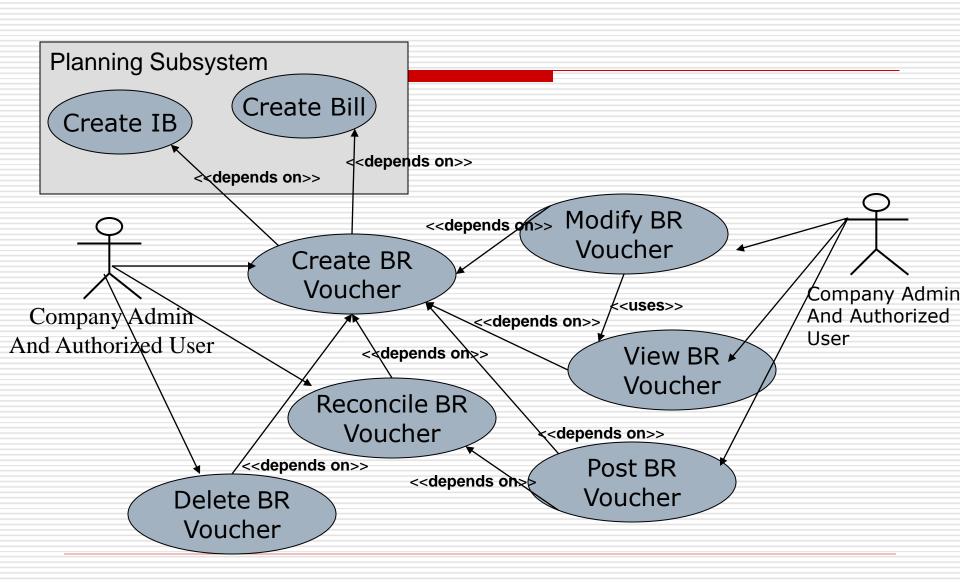


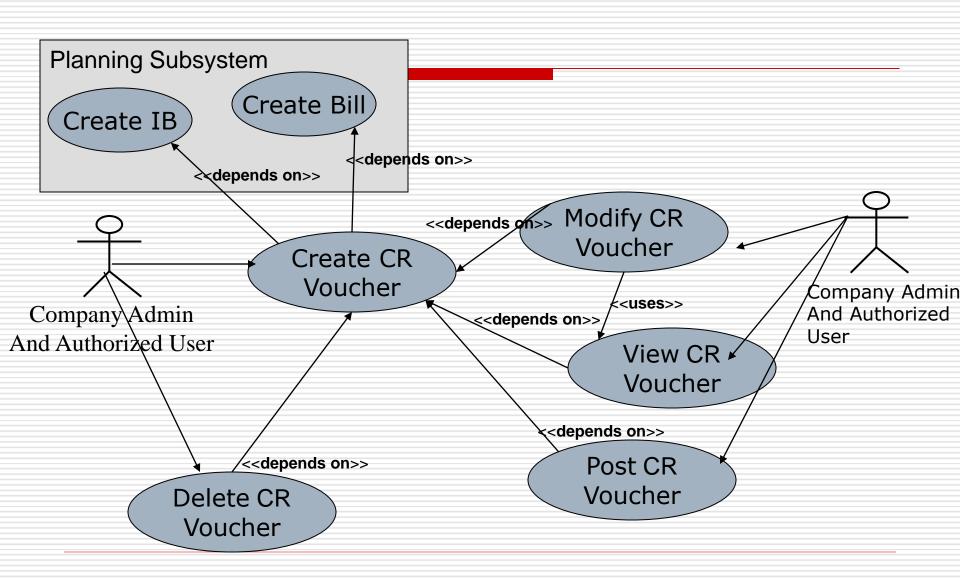
#### Account Management Subsystem

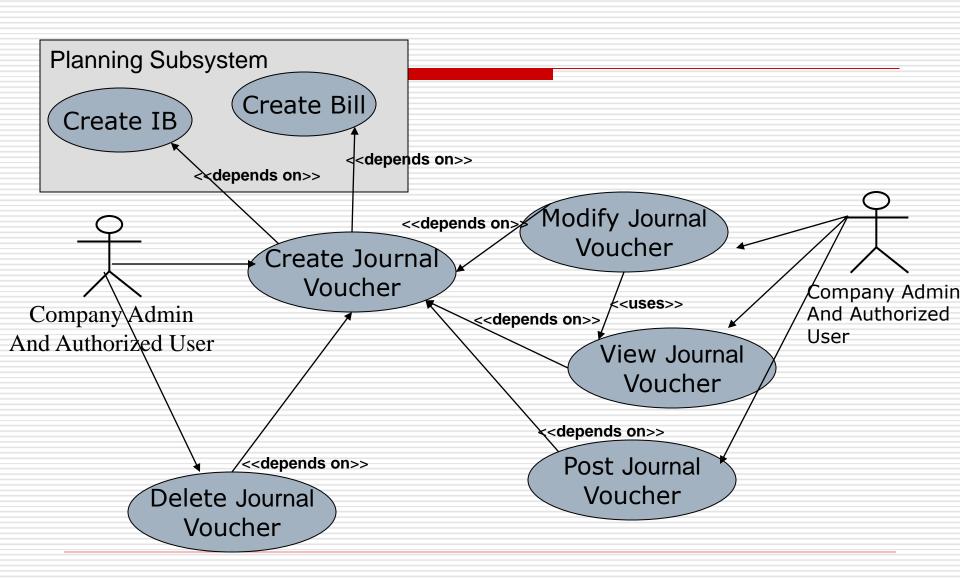




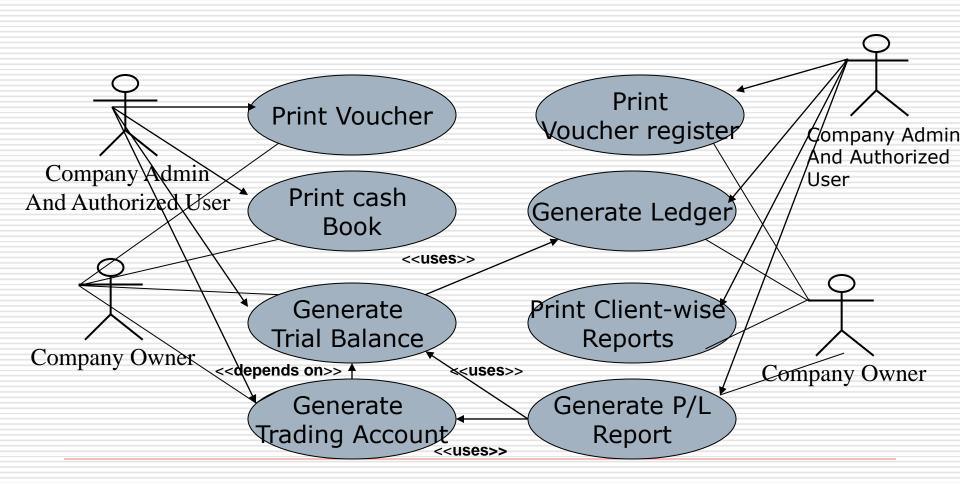




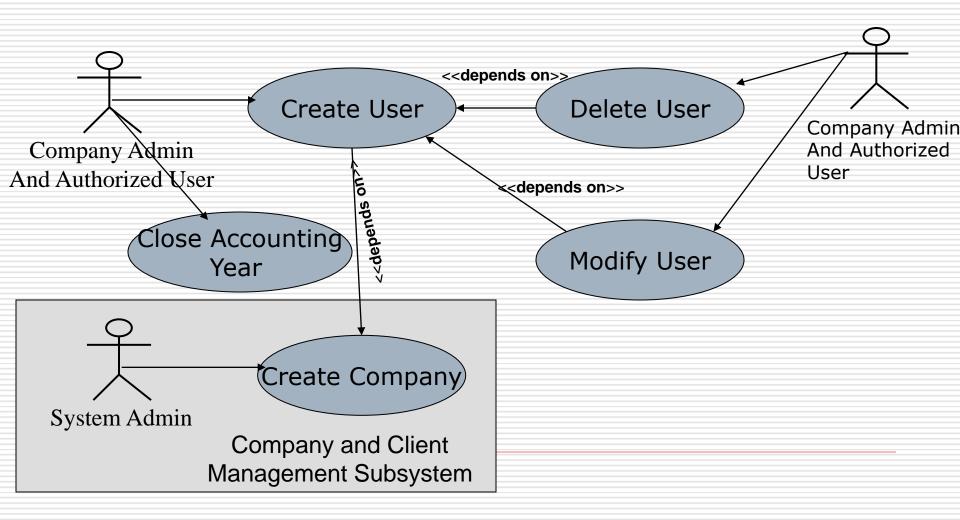




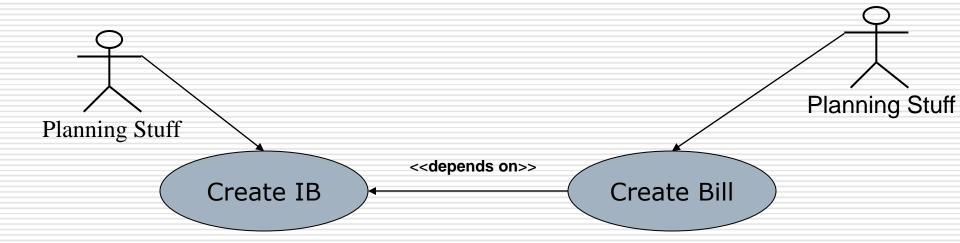
#### Reporting Subsystem



#### User Management Subsystem



#### Planning Subsystem



### Create Company

- ☐ Priority: High
- □ Primary Actor: System Administrator
- ☐ Other Interested Stakeholders: Company Owner
- Description: The number of companies is flexible and there can be such a situation where a new company should be created. Then system administrator can do such using this use-case.

### Create Company (cont..)

- Precondition: The user currently logged in must have the authorization to create company.
- □ Trigger: System administrator selects the create company command.
- ☐ Typical Course of Events:
  - 1. System asks the user to enter company name.
  - 2. User enters the company name.

## Create Company (cont...)

#### ☐ Typical Course of Events:

- 3. System checks whether the company name is unique.
- 4. System shows the form for the user to enter other company related information like address, phone no, fax, email etc.
- 5. User enters the necessary information and commands to store them.
- System generates username, password and service attribute and records the new company.

### Create Company (cont...)

- □ Alternate Course of Events:
  - 3. Alt: System finds that the company name is not unique. It then asks the user to reenter the company name again.
- Post Condition: A new company account is created.

## Modify Company

- ☐ Priority: Low
- Primary Actor: Company administrator
- □ Other Interested Stakeholders: Owner
- Description: Some of the data of an existing company may need to be modified. Then authorized user can do such using this usecase.

# Modify Company (cont..)

- Precondition: The user currently logged in must have the authorization to create company.
- Trigger: System administrator selects the modify company command.
- ☐ Typical Course of Events:
  - System asks the user to enter company name.
  - 2. User enters the company name.

## Modify Company (cont...)

#### ☐ Typical Course of Events:

- System checks whether the company name entered by the user matches any of the saved company name.
- 4. System shows the form for the user to fill other company related information like address, phone no, fax, email etc with the previous value of those fields appearing.
- 5. User changes necessary information and commands to store them.
- 6. System modifies the company account.

## Modify Company (cont...)

- □ Alternate Course of Events:
  - 3. Alt: System finds that the company name entered by the user does not match with saved company name. It then rejects the entered company name and asks the user to reenter the company name again.
- Post Condition: The respective informations of the company account is changed.

### Create User

- ☐ Priority: High
- Primary Actor: Company administrator.
- □ Other Interested Stakeholders: New user for whom the account is being created.
- □ Description: This use-case depicts the way to create a new user account.

### Create User (cont..)

- □ Precondition: The user currently logged in must have the authorization to create user.
- Trigger: User selects the create new user command.
- ☐ Typical Course of Events:
  - 1. System asks the privileged user to enter user name for the new user.
  - The privileged user enters the new user name.

### Create User (cont...)

#### ☐ Typical Course of Events:

- 3. System checks whether the new user name is unique.
- 4. System shows the form for the privileged user to enter other information like user\_id, password etc for the new user.
- The privileged user enters the necessary information and commands to store the record.
- System sets the status field to be valid and creates a new user account.

## Create User (cont...)

- □ Alternate Course of Events:
  - 3. Alt: System finds that the new user name is not unique. It then asks the privileged user to reenter the new user name again.
- Post Condition: A new user account is created.

### Modify User

- ☐ Priority: Low
- □ Primary Actor: Company administrator
- Other Interested Stakeholders: The user to be modified
- Description: Some of the data of an existing user account may need to be modified or even a user account may need to be deleted. The authorized user can do such things using this use-case

## Modify User (cont..)

- Precondition: The user currently logged in must have the authorization to create company.
- ☐ Trigger: User selects the modify user command.
- ☐ Typical Course of Events:
  - 1. System asks the privileged user to enter the user name to be modified.
  - 2. The privileged user enters the that user name

## Modify User (cont...)

#### ☐ Typical Course of Events:

- System checks whether the user name entered by the privileged user matches with any saved user account.
- 4. System shows the form for the privileged user to fill other related information like user\_id , password , status etc with the previous value of those fields appearing.
- 5. The privileged user changes necessary information and selects to save.
- 6. System modifies the user account.

# Modify User (cont...)

- □ Alternate Course of Events:
  - 3. Alt: System finds that the user name entered by the privileged user does not match with any saved user account. It then rejects the entered user name and asks the privileged user to reenter the user name again.
- Post Condition: The respective fields of the user account is changed.

### Create Client

- ☐ Priority: High
- □ Primary Actor: System administrator.
- ☐ Other Interested Stakeholders: Company Owner, The client to be created
- Description: When a new client comes to a statement with the organization, we need to create a new client account. Authorized user can do such using this use-case

### Create Client (cont..)

- Precondition: The user currently logged in must have the authorization to create company.
- ☐ Trigger: User selects the create client command.
- ☐ Typical Course of Events:
  - System asks the user to enter client\_id.
  - 2. User enters the client\_id.
  - System checks whether the client\_id is unique.

### Create Client (cont...)

#### ☐ Typical Course of Events:

- 4. System shows the form for the user to enter other client related information like client name, address, phone no, fax, email, contact person, agency commission etc.
- 5. User fills the necessary information and selects to store them.
- System finds user\_id of the current user and takes it to be the value of the client\_creator field.
- System creates a client account .

### Create Client (cont...)

- □ Alternate Course of Events:
  - 3. Alt: System finds that the client\_id is not unique. It then asks the user to reenter the client\_id again.
- Post Condition: A new client account is created.

## **Modify Client**

- ☐ Priority: Low
- Primary Actor: System administrator
- Other Interested Stakeholders: Client to be modified, company owner.
- Description: Some of the data of an existing client may need to be modified. Then authorized user can do such using this usecase

### Modify Client (cont..)

- Precondition: The user currently logged in must have the authorization to create company.
- Trigger: User selects the modify client command.
- ☐ Typical Course of Events:
  - 1. System asks the user to enter client\_id.
  - 2. User enters the client\_id.
  - System checks whether the client\_id entered by the user matches any of the saved client account.

## Modify Client (cont...)

### ☐ Typical Course of Events:

- 3. System shows the form for the user to fill other client related information like client name, address, phone no, fax, email, contact person, agency commission etc with the previous value of those fields appearing.
- User changes necessary information and selects to store them.
- 5. System modifies the client account.

# Modify Client (cont...)

- □ Alternate Course of Events:
  - 3. Alt: System finds that the client\_id entered by the user does not match with any saved client account. It then rejects the entered client\_id and asks the user to reenter the client\_id again.
- Post Condition: The respective information of the client account is changed.

### Create Account

- □ Priority: High
- Primary Actor: Company Administrator, Privileged users
- □ Secondary Actor: Planning stuffs they may need new accounts when new client is added
- Description: Account is one of the main objects in a accounting system. This accounting system needs to create accounts to capture the records of money transactions. Whenever a new client, party, employee is added in the system, corresponding accounts are needed to be created.

- Precondition: The user needs to have privilege to create accounts.
- ☐ Typical Course of events:
  - Step 1: The user wants to create a new account.
  - Step 2: User provides necessary information like account name, code etc.
  - Step 3: User chooses whether this account is a sub-ledger or not.

- Step 4: If it is a sub-ledger, then he needs to choose it's parent account. Else he needs to specify it's type, that is whether it is a manufacturing account or trading account etc. and on what side it will go, that is whether it will be on the debit side or credit side.
- Step 5: User enters the yearly budget for this account
- Step 6: The system responds by checking that the user has entered all necessary information.

- Alt Step 1: The user may not have privilege to create account. System alerts him.
- Alt Step 2: This code may already exists. User is alerted.
- Alt Step 6: If the user has not provided all the information, he is alerted
- Alt Step 7: The user may cancel the process any time before saving the information.
- Conclusion: This use case concludes when the user receives a confirmation message of successful creation of an account.

- ☐ Post Condition: An account is successfully created.
- ☐ Business Rules:
  - Voucher entry is possible for sub ledgers only.
  - If a account is a sub ledger, then it's category is same as it's parent account and side is same as parent account.

### View Account

- □ Priority: Normal
- Primary Actor: Company Administrator, Privileged users
- □ Other Interested Stakeholders:
- Description: The users may need to view the information of an account at any time.

### View Account (cont...)

- Precondition: The user needs to have privilege to create accounts.
- ☐ Typical Course of events:
  - Step 1: The user wants to view a new account.
  - Step 2: User provides account name or code.
  - Step 3: The system responds by showing the information of that account.

## View Account (cont...)

- Alt Step 1: The user may not have privilege to create account. System alerts him.
- Alt Step 2: This code may not exist. User is alerted.
- Alt Step 3: The user may cancel the process any time before saving the information.
- Conclusion: This use case concludes when the user view the information of an account.

### Modify Account

- □ Priority: Normal
- Primary Actor: Company Administrator, Privileged users.
- Description: If the user feels that the information of an account is wrong or have changed, he may need to modify it.

## Modify Account (cont...)

- Precondition: The user needs to have privilege to create accounts.
- ☐ Typical Course of events:
  - Step 1: The user wants to modify a new account.
  - Step 2: User provides necessary information like account name, code etc.
  - Step 3: The system responds by showing all the information of that account.
  - Step 4: The user may alter the information and chooses to save modifications.

## Modify Account (cont...)

- Step 6: The system responds by checking that the user has entered all necessary information.
- Alt Step 1: The user may not have privilege to modify account. System alerts him.
- Alt Step 6: If the user has not provided all the information, he is alerted
- Alt Step 7: The user may cancel the process any time before saving the information.
- Conclusion: This use case concludes when the user receives a confirmation message of successful modification of an account.

## Modify Account (cont...)

- Post Condition: An account is successfully modified.
- □ Business Rules:
  - If an account is so that voucher entry is possible with it, then after modification, it cannot be a parent account.
  - After modification, all the account that are child of the modified account, may need to be modified so that their type and side remains same with their new parent.

### Close Account

- □ Priority: Normal
- Primary Actor: Company Administrator, Privileged users.
- Description: If the user feels that the information of an account is not necessary any more or the account is obsolete, he may close it. It may occur when they finishes business relations with a client, party or employee.

Precondition: The user needs to have privilege to close accounts.

#### ☐ Typical Course of events:

- Step 1: The user wants to close a new account.
- Step 2: User provides necessary information like account name, code etc.
- Step 3: The system responds by showing all the information of that account.
- Step 4:The user chooses to close that account.

- Step 5: The system responds by checking that it is possible to close that account. If possible, the account is closed.
- Alt Step 1: The user may not have privilege to modify account. System alerts him.
- Alt Step 2: This code may not exist. User is alerted.
- Alt Step 4: If the user has not provided all the information, he is alerted

- Alt Step 5: It may not be possible to close the account. He is alerted
- Alt Step 6: The user may cancel the process any time before saving the information.
- Conclusion: This use case concludes when the user receives a confirmation message of successful closing of an account.
- Post Condition: An account is successfully closed and no voucher entry or reports can be seen regarding that account.

#### ☐ Business Rules:

- An account with active child accounts cannot be closed. User needs to close child accounts first
- An account with un-posted vouchers cannot be closed.
- An account whose balance is not zero cannot be closed.

### Reopen Account

- ☐ Priority: Less
- Primary Actor: Company Administrator, Privileged users.
- Description: If the user feels that a closed account is necessary again, he may reopen it. It may occur when they restarts business relations with a client, party or employee that was postponed.

- Precondition: The user needs to have privilege to reopen accounts.
- ☐ Typical Course of events:
  - Step 1: The user wants to reopen a account.
  - Step 2: User provides necessary information like account name, code etc.
  - Step 3: The system responds by showing all the information of that account.
  - Step 4:The user chooses to reopen that account.

- Step 5: The system responds by checking that it is possible to reopen that account. If possible, the account is reopened.
- Alt Step 1: The user may not have privilege to reopen account. System alerts him.
- Alt Step 2: This code may not exist. User is alerted.
- Alt Step 4: If the user has not provided all the information, he is alerted

- Alt Step 5: It may not be possible to reopen the account. He is alerted
- Alt Step 6: The user may cancel the process any time before saving the information.
- Conclusion: This use case concludes when the user receives a confirmation message of successful reopening an account.

Post Condition: An account is successfully reopened and voucher entry or reports can be seen regarding that account.

#### ☐ Business Rules:

An account with closed parent accounts cannot be reopened. User needs to reopen parent accounts first.

### Create Implementation Brief

- ☐ Priority:
  - High
- ☐ Primary Actor:
  - Planning stuffs
- ☐ Secondary Actor:
  - Management
- □ Other Interested Stakeholders:
  - Clients
- ☐ Description:
  - This use case describes the event of creating a marketing plan for a client.

### Create Implementation Brief (cont...)

#### □ Precondition:

The client must be registered with the company.

#### ☐ Trigger:

This use case is initiated when a implementation brief is prepared.

#### ☐ Typical Course of Events:

- 1. The actor selects a client code.
- 2. System asks for the brand name.
- The actor selects a brand name and a campaign.
- The actor selects the date range for the IB.
- 5. The actor selects the target group.
- The actor enters budget for TV, press, radio, cinema, outdoor and others.
- 7. System generated a IB code and records the IB information.

### Create Implementation Brief (cont...)

- ☐ Conclusion:
  - The new IB is sent to client for approval.
- ☐ Post Condition:
  - A new IB is created for the client.

### Create Bill

- ☐ Priority: High
- ☐ Primary Actor:
  - Planning stuffs
- ☐ Secondary Actor:
  - Accounting stuffs
- □ Other Interested Stakeholders:
  - Clients (Bill receiver)
  - Parties (Bill receiver)
- ☐ Description:
  - This use case describes the event of a planning stuff generating bill for the clients and parties.

## Create Bill (cont...)

- ☐ Precondition:
  - Confirmation arrives from advertise monitoring agency
- ☐ Trigger:
  - End of month reached
- ☐ Typical Course of Events:
  - 1. The planning stuff selects client code.
  - 2. System asks for IB code and media type.
  - 3. The planning stuff selects IB code and media type.
  - 4. The planning stuff calculates the bill.
  - 5. The planning stuff enters heading, enclosure, notes & reference for the bill.
  - 6. The planning stuff commands system to record the bill.
  - System generates a bill no. and records the bill date and bill information.
  - 8. System generates a journal voucher for the bill.

## Create Bill (cont...)

- ☐ Alternate Course of Events:
  - 6. The planning stuff commands system to record and print the bill.
- ☐ Conclusion:
  - The Bill is recorded as a journal voucher.
- □ Post Condition:
  - All bills are generated for a client's one specific IB and each media type.
- □ Business Rules:
  - A different Bill is generated for each IB and each media type.
  - Transaction Rules:
    - ☐ Client Bill:
      - Billing By Media A/C cr.
      - Bills Receivable by Client A/C dr.
    - □ Party Bill:
      - Cost of Billing by Media A/C dr.
      - Bills payable by party A/C cr.

# Create Bank Payment Voucher

- ☐ Priority: High
- ☐ Primary Actor:
  - Accounting stuffs
- □ Other Interested Stakeholders:
  - Finance officer
  - Client
  - Party
  - Employee
- ☐ Description:
  - This use case describes the event of an accounting stuff creating a bank payment voucher.

#### ☐ Precondition:

The client/party/employee must have a account.

#### ☐ Trigger:

This use case is initiated when a new bank payment voucher is prepared.

#### ☐ Typical Course of Events:

- 1. System sets date to current date.
- 2. System sets Voucher No. to be the last bank payment voucher no. of that month.
- 3. The actor enters a description for the voucher.

### ☐ Typical Course of Events (cont...):

- 4. The actor enters a cheque no.
- 5. The actor selects the bank account code.
- 6. System sets the creditor details to the bank account name.
- 7. The actor selects the type of payment.
- 8. The actor selects a debtor account code.
- System sets the debtor details to the name of the selected debtor account.
- 10. System generates a serial no.
- 11. The actor enters the debit amount in taka.

- ☐ Typical Course of Events (cont...):
  - 12. System asks for whether the actor wants to add more debtors.
  - 13. If the actor doesn't want to add more debtors, he commands the system to record the voucher.
  - 14. System records the voucher.

#### □ Alternate Course of Events:

- 1. The actor may change the date.
- 6. The actor may change the bank account details.
- 11.a. If the category of the debtor account code is "trading account", then the actor may select the client code, mode of payment, IB Code/Bill no & amount for each IB Code/Bill no.
- 11.b. If the category of the debtor account code is "P/L account", then the actor may select the employee code, mode of payment.
- 11.c. If the category of the debtor account code is "Balance Sheet", then the actor may enter the mode of payment.
- 13. If the actor wants to add more debtors to this voucher, he moves to step 8.

- ☐ Conclusion:
  - The Bank payment voucher is created.
- □ Business Rules:
  - Only one voucher can be prepared against one cheque no.
  - One account code can't appear more than once in a voucher.
  - Type of Payment:
    - TV
    - PRESS
    - □ RADIO
    - CINEMA
    - OUTDOOR
    - OTHER
    - EXPENSE
    - PROVISION

## Create Cash Payment Voucher

- ☐ Priority: High
- ☐ Primary Actor:
  - Accounting stuffs
- □ Other Interested Stakeholders:
  - Finance officer
  - Client
  - Party
  - Employee
- ☐ Description:
  - This use case describes the event of an accounting stuff creating a cash payment voucher.

#### ☐ Precondition:

The client/party/employee must have a account.

#### ☐ Trigger:

This use case is initiated when a new cash payment voucher is prepared.

#### ☐ Typical Course of Events:

- 1. System sets date to current date.
- System sets Voucher No. to be the last cash payment voucher no. of that month.
- 3. The actor enters a description for the voucher.

### ☐ Typical Course of Events (cont...):

- 4. System sets the cash account code.
- System sets the creditor details to the cash account name.
- 6. The actor selects the type of payment.
- 7. The actor selects a debtor account code.
- System sets the debtor details to the name of the selected debtor account.
- 9. System generates a serial no.
- 10. The actor enters the debit amount in taka.

- ☐ Typical Course of Events (cont...):
  - 11. System asks for whether the actor wants to add more debtors.
  - 12. If the actor doesn't want to add more debtors, he commands the system to record the voucher.
  - 13. System records the voucher.

#### ☐ Alternate Course of Events:

- 1. The actor may change the date.
- 10.a. If the category of the debtor account code is "trading account", then the actor may select the client code, mode of payment, IB Code/Bill no & amount for each IB Code/Bill no.
- 10.b. If the category of the debtor account code is "P/L account", then the actor may select the employee code, mode of payment.
- 10.c. If the category of the debtor account code is "Balance Sheet", then the actor may enter the mode of payment.
- 12. If the actor wants to add more debtors to this voucher, he moves to step 7.

- □ Conclusion:
  - The Cash payment voucher is created.
- Post Condition:
- □ Business Rules:
  - One account code can't appear more than once in a voucher.
  - Type of Payment:
    - TV
    - PRESS
    - RADIO
    - CINEMA
    - OUTDOOR
    - OTHER
    - EXPENSE
    - PROVISION

### Create Bank Receive Voucher

- ☐ Priority: High
- ☐ Primary Actor:
  - Accounting stuffs
- □ Other Interested Stakeholders:
  - Finance officer
  - Client
  - Party
  - Employee
- ☐ Description:
  - This use case describes the event of an accounting stuff creating a bank receive voucher.

#### ☐ Precondition:

The client/party/employee must have a account.

#### ☐ Trigger:

This use case is initiated when a new bank receive voucher is prepared.

#### ☐ Typical Course of Events:

- 1. System sets date to current date.
- 2. System sets Voucher No. to be the last bank receive voucher no. of that month.
- 3. The actor enters a description for the voucher.

### ☐ Typical Course of Events (cont...):

- 4. The actor enters a cheque no.
- 5. The actor selects the bank account code.
- 6. System sets the debtor details to the bank account name.
- 7. The actor selects the type of receive.
- 8. The actor selects a creditor account code.
- System sets the creditor details to the name of the selected creditor account.
- 10. System generates a serial no.
- 11. The actor enters the credit amount in taka.

- ☐ Typical Course of Events (cont...):
  - 12. System asks for whether the actor wants to add more creditor accounts.
  - 13. If the actor doesn't want to add more creditors, he commands the system to record the voucher.
  - 14. System records the voucher.

#### ☐ Alternate Course of Events:

- 1. The actor may change the date.
- 6. The actor may change the bank account details.
- 11.a. If the type of receive is "Client", then the actor may select the client code, mode of receive, IB Code/Bill no & amount for each IB Code/Bill no.
- 11.b. If the type of receive is "Inter Company", then the actor may select the mode of receive.
- 11.c. If the type of receive is "Other", then the actor may select the mode of receive.
- 13. If the actor wants to add more creditors to this voucher, he moves to step 8.

- □ Conclusion:
  - The Bank receive voucher is created.
- □ Post Condition:
- □ Business Rules:
  - Only one voucher can be prepared against one cheque no.
  - One account code can't appear more than once in a voucher.
  - Type of Receive:
    - Client
    - □ Inter Company
    - Other

### Create Cash Receive Voucher

- ☐ Priority: High
- ☐ Primary Actor:
  - Accounting stuffs
- □ Other Interested Stakeholders:
  - Finance officer
  - Client
  - Party
  - Employee
- ☐ Description:
  - This use case describes the event of an accounting stuff creating a cash receive voucher.

#### □ Precondition:

The client/party/employee must have a account.

#### ☐ Trigger:

This use case is initiated when a new cash receive voucher is prepared.

#### ☐ Typical Course of Events:

- 1. System sets date to current date.
- System sets Voucher No. to be the last cash receive voucher no. of that month.
- 3. The actor enters a description for the voucher.

#### ☐ Typical Course of Events (cont...):

- 4. The actor selects the cash account code.
- 5. System sets the debtor details to the cash account name.
- 6. The actor selects the type of receive.
- 7. The actor selects a creditor account code.
- 8. System sets the creditor details to the name of the selected creditor account.
- 9. System generates a serial no.
- 10. The actor enters the credit amount in taka.

- ☐ Typical Course of Events (cont...):
  - 11. System asks for whether the actor wants to add more creditor accounts.
  - 12. If the actor doesn't want to add more creditors, he commands the system to record the voucher.
  - 13. System records the voucher.

#### ☐ Alternate Course of Events:

- 1. The actor may change the date.
- 10.a. If the type of receive is "Client", then the actor may select the client code, mode of receive, IB Code/Bill no, & amount for each IB Code/Bill no.
- 10.b. If the type of receive is "Inter Company", then the actor may select the mode of receive.
- 10.c. If the type of receive is "Other", then the actor may select the mode of receive.
- 12. If the actor wants to add more creditors to this voucher, he moves to step 7.

- □ Conclusion:
  - The Cash receive voucher is created.
- □ Business Rules:
  - One account code can't appear more than once in a voucher.
  - Type of Receive:
    - Client
    - □ Inter Company
    - □ Other

### Create Journal Voucher

- ☐ Priority: High
- ☐ Primary Actor:
  - Accounting stuffs
- □ Other Interested Stakeholders:
  - Finance officer
  - Employee
- ☐ Description:
  - This use case describes the event of an accounting stuff creating a adjustment voucher.

#### ☐ Precondition:

The client/party/employee must have a account.

#### ☐ Trigger:

This use case is initiated when a new journal voucher is prepared.

#### ☐ Typical Course of Events:

- 1. System sets date to current date.
- System sets Voucher No. to be the last cash receive voucher no. of that month.
- 3. The actor enters a description for the voucher.

#### ☐ Typical Course of Events (cont...):

- 4. The actor selects a account code.
- 5. System sets the account details to the name of the selected account.
- System generates a serial no.
- 7. The actor set s this accounts as debtor or creditor account.
- The actor selects the type of adjustment.
- 9. The actor enters the amount in taka.
- 10. System asks for whether the actor wants to add more accounts.

- ☐ Typical Course of Events (cont...):
  - 11. If the actor doesn't want to add more accounts, he commands the system to record the voucher.
  - 12. System records the voucher.

### ☐ Alternate Course of Events:

- 1. The actor may change the date.
- 8.a. If the type of adjustment is "Job", then the actor may select the client code, IB Code/Bill no & amount.
- 8.b. If the type of adjustment is "Expense", then the actor may select the employee code.
- 11. If the actor wants to add more creditors to this voucher, he moves to step 4.

- ☐ Conclusion:
  - The Journal voucher is created.
- □ Business Rules:
  - One account code can't appear more than once in a voucher.
  - Type of Adjustment:
    - Job
    - Expense
    - Provision

### Delete Voucher

- □ Priority: Low
- Primary Actor: Company Administrator & Accounting Stuffs
- Description: Voucher is one of the important document in an Accounting System. When the voucher transaction is invalid, the voucher is deleted.
- Precondition: The users must have enough privilege to delete the voucher.

# Delete Voucher (Cont.)

■ Typical Course of Events:

- Typical Course of Live	
Actor	System Response
1.User opens the delete voucher interface.	2.System shows the options for entering voucher no and created on.
3.User enter necessary information to delete the required voucher.	4.System finds the voucher and sets its status entry false.
	5.System then finalize it by sending a confirmation message to user.

# Delete Voucher (Cont.)

- Alternate Course of Events:
  - □ Alt-Step 4.a System finds the voucher no and created on is not properly input by user. Return error messages to user to correct it.
  - □ Alt-Step 4.b System can't find the specified voucher. User is informed that the specified voucher is not found & can't be deleted.
- □ Post Condition: The specified voucher is deleted.

# Modify Voucher

- Priority: Medium
- Primary Actor: Company Administrator & Accounting Stuffs
- Description: Voucher is one of the important document in an Accounting System. When the transaction amount of a voucher is changed, then the voucher may need to be modified.
- Precondition: The users must have enough privilege to modify the voucher.

# Modify Voucher (Cont.)

### ☐ Typical Course of Events:

, ·	
Actor	System Response
1.User enter necessary information to find the required voucher to modify.	2.System finds the voucher and give options to the user to modify its different parts.
3.User modifies necessary information.	4.Finally, System modify it and sends a confirmation message to user.

# Modify Voucher (Cont.)

□ Alternate Course of Events:

Alt-Step 4.a System finds the voucher no and created on is not properly input by user. Return error messages to user to correct it.

Alt-Step 4.b System can't find the specified voucher. User is informed that the specified voucher is not found & can't be modified.

Post Condition: The specified voucher is modified by user specification.

### View Deleted Voucher

- ☐ Priority: Low
- Primary Actor: Company Administrator & Accounting Stuffs
- Description: Voucher is one of the important document in an Accounting System. When some past transaction is reviewed, then the deleted voucher may need to be viewed.
- Precondition: The users must have enough privilege to view the deleted voucher.

## View Deleted Voucher (Cont.)

☐ Typical Course of Events:

Actor	System Response
	2.System shows the all the voucher information.

Post Condition: The deleted voucher is viewed by the privileged user.

### View Modified Voucher

- Priority: Low
- Primary Actor: Company Administrator & Accounting Stuffs
- Description: Voucher is one of the important document in an Accounting System. When some past transaction is reviewed, then the modified voucher may need to be viewed.
- Precondition: The users must have enough privilege to view the modified voucher.

# View Modified Voucher (Cont.)

☐ Typical Course of Events:

Actor	System Response
1.User selects the modified	2.System shows the all the
voucher to be viewed.	voucher information.

Post Condition: The modified voucher is viewed by the privileged user.

### View Voucher

- Priority: High
- Primary Actor: Company Administrator & Accounting Stuffs
- Description: Voucher is one of the important document in an Accounting System. When some past valid transaction is reviewed, then the voucher may need to be viewed.
- Precondition: The users must have enough privilege to view the voucher.

# View Voucher (Cont.)

☐ Typical Course of Events:

Actor	System Response
1.User selects the voucher	2.System shows the all the
to be viewed.	voucher information.

Post Condition: The voucher is viewed by the privileged user.

#### Reconcile BP Vouchers

- □ Priority: Normal
- Primary Actor: Company Administrator, Privileged users.
- Description: After each month, the bank issues a list of cheque drawn from that account. That is the actual amount of money that has been removed from the company account. BP voucher are reconciled according to this

# Reconcile BP Vouchers (cont...)

- Precondition: The user needs to have privilege to reconcile BP vouchers.
- ☐ Typical Course of events:
  - Step 1: The user wants to see the list of BP vouchers that is not reconciled.
  - Step 2:User reconciles the appropriate vouchers seeing the bank statement.
  - Step 3: The user saves all these information.
  - Step 4: The system responds by setting the reconciled bit of the voucher table.

## Reconcile BP Vouchers (cont...)

- Alt Step 1: The user may not have privilege to reconcile vouchers. System alerts him.
- Alt Step 4: The user may cancel the process at any time before saving.

# Reconcile BP Vouchers (cont...)

- □ Post Condition: The reconciled bit of the BP vouchers are set true.
- ☐ Business Rules:
  - A BP Voucher needs to be reconciled before being posted.
  - After reconciliation, BP voucher information cannot be modified.

## Reconcile BR Vouchers

- □ Priority: Normal
- Primary Actor: Company Administrator, Privileged users.
- ☐ Secondary Actors: Bank
- Description: After each month, the bank issues a list of cheque deposited at that account. That is the actual amount of money that has been received at that company account. BR voucher are reconciled according to this.

## Reconcile BR Vouchers (cont...)

- Precondition: The user needs to have privilege to reconcile BR vouchers.
- ☐ Typical Course of events:
  - Step 1: The user wants to see the list of BR vouchers that is not reconciled.
  - Step 2:User reconciles the appropriate vouchers seeing the bank statement.
  - Step 3: The user saves all these information.
  - Step 4: The system responds by setting the reconciled bit of the voucher table.

## Reconcile BR Vouchers (cont...)

- Alt Step 1: The user may not have privilege to reconcile vouchers. System alerts him.
- Alt Step 4: The user may cancel the process at any time before saving.

## Reconcile BR Vouchers (cont...)

- □ Post Condition: The reconciled bit of the BR vouchers are set true.
- ☐ Business Rules:
  - A BR Voucher needs to be reconciled before being posted.
  - After reconciliation, BR voucher information cannot be modified.

## Post Vouchers

- □ Priority: High
- Primary Actor: Company Administrator, Privileged users.
- □ Secondary Actor: Checking person
- Description: When a voucher is finalized, it is posted.

# Post Vouchers (cont...)

- Precondition: The user needs to have privilege to post vouchers.
- ☐ Typical Course of events:
  - Step 1: The user wants to see the list of vouchers that is not posted.
  - Step 2:User posts the appropriate vouchers
  - Step 3: The user saves all these information.
  - Step 4: The system responds by setting the posted bit of the voucher table.

# Post Vouchers (cont...)

- Alt Step 1: The user may not have privilege to reconcile vouchers. System alerts him.
- Alt Step 4: The user may cancel the process at any time before saving.

# Post Vouchers (cont...)

☐ Post Condition: The posted bit of the vouchers are set true.

#### ☐ Business Rules:

- A BR/BP Voucher needs to be reconciled before being posted.
- After being posted, voucher information cannot be modified.

## Closing Accounting Year

- □ Priority: High
- Primary Actor: Company Administrator.
- Description: When an accounting period (financial year) is finished, accounting system needs to close accounting year to finalize some accounts behavior.

## Closing Accounting Year (cont...)

- Precondition: The user needs to have privilege to close accounting year.
- ☐ Typical Course of events:
  - Step 1: The user wants to close current accounting year.
  - Step 2: The system responds by taking appropriate steps.

## Closing Accounting Year (cont...)

- Alt Step 1: The user may not have privilege to close accounting year. System alerts him.
- Alt Step 2: The user may cancel the process at any time before saving.

## Closing Accounting Year (cont...)

Post Condition: The accounting year is closed. Closing entries to expenditure accounts are made, and they are balanced to zero. Appropriate entries are made to the profit and loss account.

#### □ Business Rules:

- A year that has un-posted vouchers cannot be closed.
- After a year closing, voucher cannot be created in that year.

## Print Voucher Register

- ☐ Priority: Medium
- ☐ Primary Actor: Authorized users
- Secondary Actor: Accountant, Finance Officer, Managing Director
- Other Interested Stakeholders: Company Owner
- Description: Voucher Registers are made for the accounting reference.

# Print Voucher Register (cont...)

- Precondition: The user needs to have privilege to create voucher register.
- ☐ Typical Course of events:

Actors Action	System Response
Actor enters a date range and voucher type to generate voucher report.	2. System prints the register.

# Print Voucher Register (cont...)

☐ Alternative Course of Events:

<b>Actors Action</b>	System Response
	1. If range is valid and authorization is ok system generates the report.
	1.a If range is invalid system asks for a valid range.

Post condition: Voucher register is printed.

## Print Voucher

- ☐ Priority: High
- Primary Actor: Authorized users
- Secondary Actor: Accountant, Finance Officer, Managing Director
- Other Interested Stakeholders: Company Owner, Parties, Clients.
- Description: Voucher is printed for approval.

# Print Voucher (cont...)

- Precondition: The user needs to have privilege to see vouchers.
- ☐ Typical Course of events:

Actors Action	System Response
1. Actor selects a voucher.	2. System prints that voucher.

# Print Voucher (cont...)

□ Alternative Course of events:

Actors Action	System Response
	1.a If date is invalid system asks for a valid date.
	1.b If voucher type with voucher no. is not found, a message is shown.

Post condition: A voucher is printed.

# Print General Ledger

- ☐ Priority: Low
- Primary Actor: Authorized users
- Secondary Actor: Accountant, Finance officer, Managing Director
- Other Interested Stakeholders: Company Owner, Parties
- Description: General Ledger are printed for maintaining accountability.

# Print General Ledger (cont...)

- Precondition: The user needs to have privilege to create General Ledger Reports.
- ☐ Typical Course of events:

Actors Action	System Response
Actor enters a date range to print General Ledger.	2. System prints the general ledger.

## Print General Ledger (cont...)

#### ☐ Alternative Course of Events:

Actors Action	System Response
	3. If date range is valid and authorization is ok system generates the report.
	3.a If date is invalid system asks for a valid date.

Post condition: General Ledger is printed.

## Print Cash Book

- ☐ Priority: Low
- Primary Actor: Authorized users
- Secondary Actor: Accountant, Finance officer, Managing Director
- Other Interested Stakeholders: Company Owner
- Description: Cash Book Reports are printed to measure cash at hand.

## Print Cash Book (cont...)

- Precondition: The user needs to have privilege to create Cashbook Reports.
- ☐ Typical Course of events:

Actors Action	System Response
1. Actor enters a date range to create Cash Book.	2. System prints the cah book.

# Print Cash Book (cont...)

#### ☐ Alternative Course of Events:

<b>Actors Action</b>	System Response
	3. If date range is valid and authorization is ok system generates the report.
	3.a If date is invalid system asks for a valid date.

Post condition: Cashbook Report is printed.

### Print Trial Balance

- ☐ Priority: Low
- ☐ Primary Actor: Authorized users
- Secondary Actor: Accountant, Finance Officer, Managing Director
- Other Interested Stakeholders: Company Owner
- Description: Trial Balance is printed to determine account balance.

## Print Trial Balance Reports (cont...)

- Precondition: The user needs to have privilege to create Trial Balance Reports.
- ☐ Typical Course of events:

Actors Action	System Response
1. Actor enters a date on	2. System prints the
which day's the Trial	Trial Balance Report.
Balance Report is	
needed.	

# Print Trial Balance Reports (cont...)

☐ Alternative Course of events:

Actors Action	System Response
	1. If date range is valid and authorization is ok system generates the report.
	1.a If date is invalid system asks for a valid date.

Post condition: A Trial Balance Report is printed.

# Print Client wise Reports

- ☐ Priority: Medium
- Primary Actor: Authorized users
- Secondary Actor: Accountant, Finance Officer, Managing Director
- Other Interested Stakeholders: Company Owner
- Description: Client wise Reports are created for viewing the business condition and taking decision accordingly based on clients current position and future potential.

# Print Client wise Reports (cont...)

- Precondition: The user needs to have privilege to create Client wise Reports.
- ☐ Typical Course of events:

Actors Action	System Response
	2. System prints the Client wise Report.

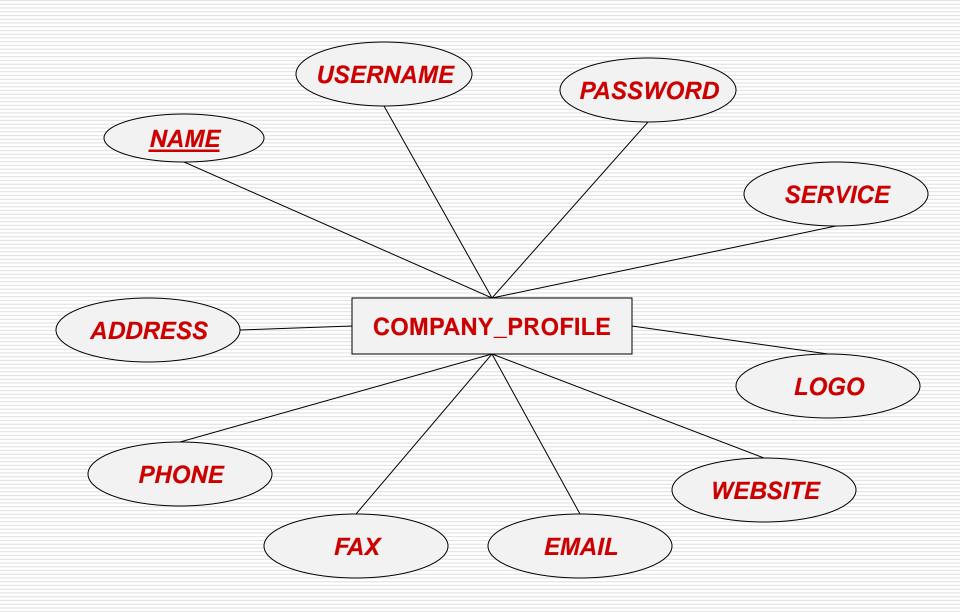
# Print Client wise Reports (cont...)

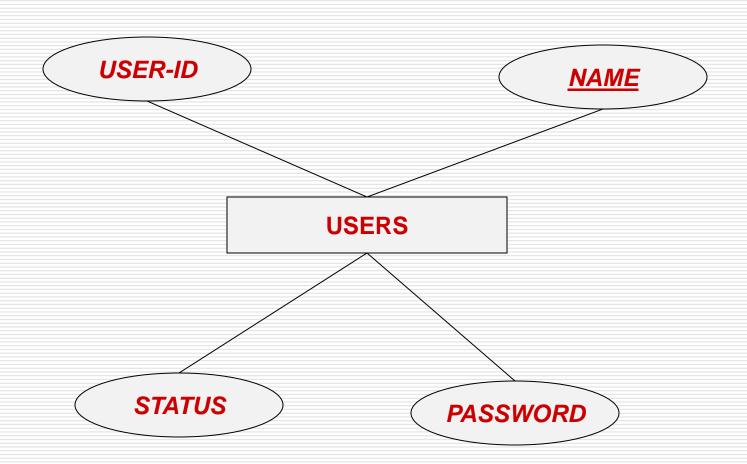
### ☐ Alternative Course of Events:

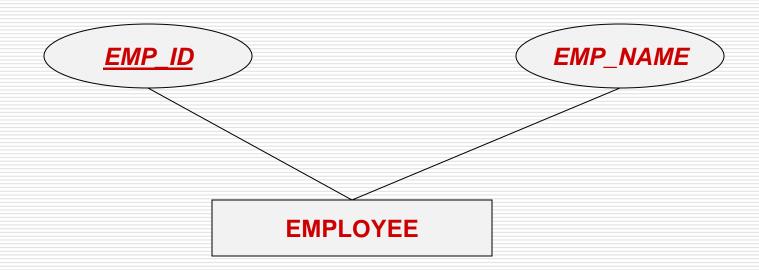
Actors Action	System Response
	1.a. If date range is valid and authorization is ok system generates the report.
	1.b. If date is invalid system asks for a valid date.

Post condition: A Client wise Report is printed.

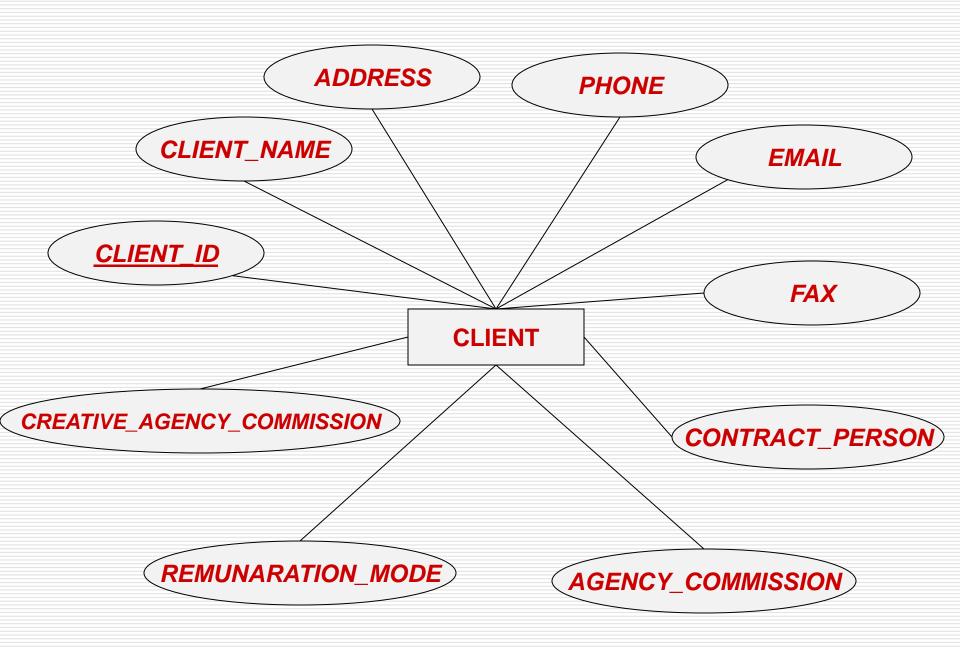
# Entity-Relationship DIAGRAM

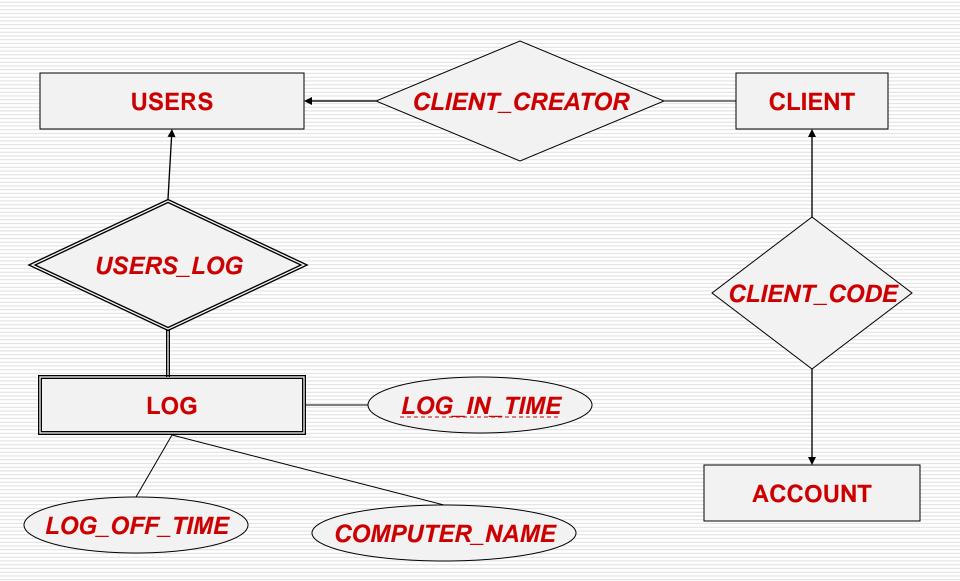


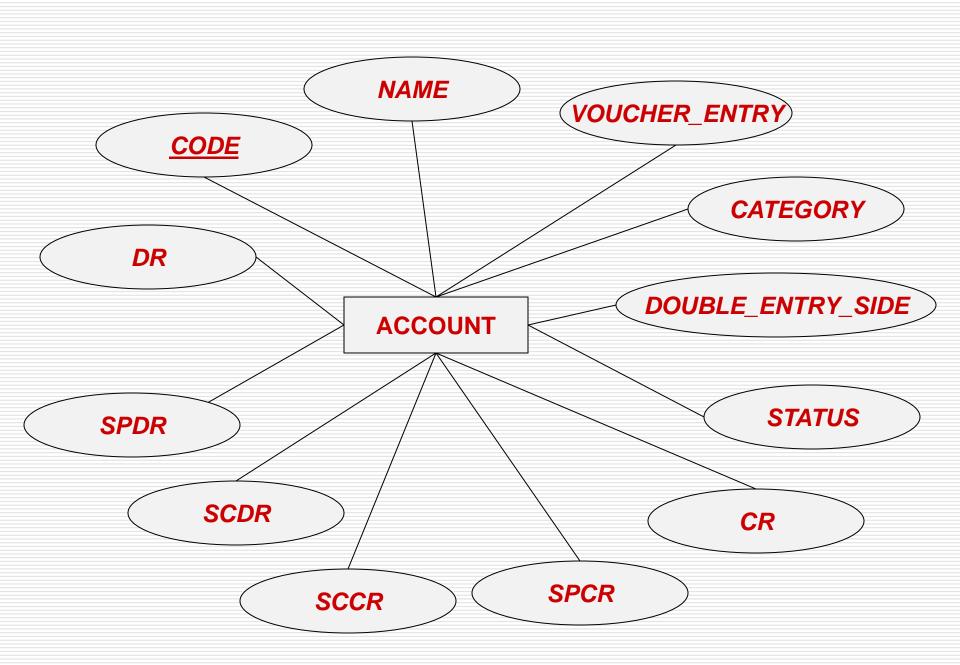


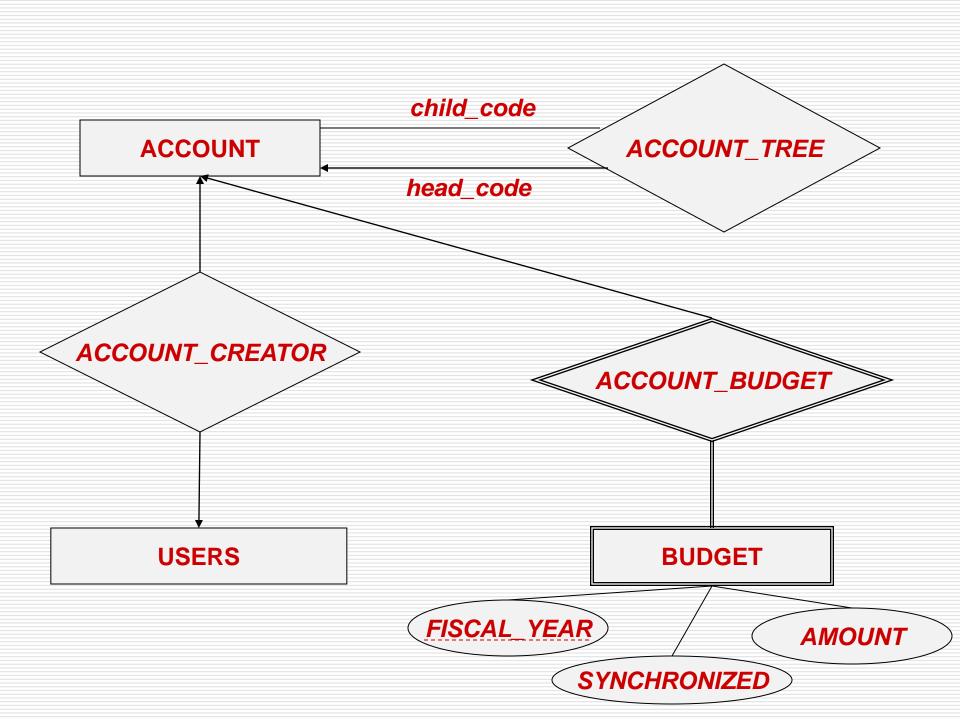


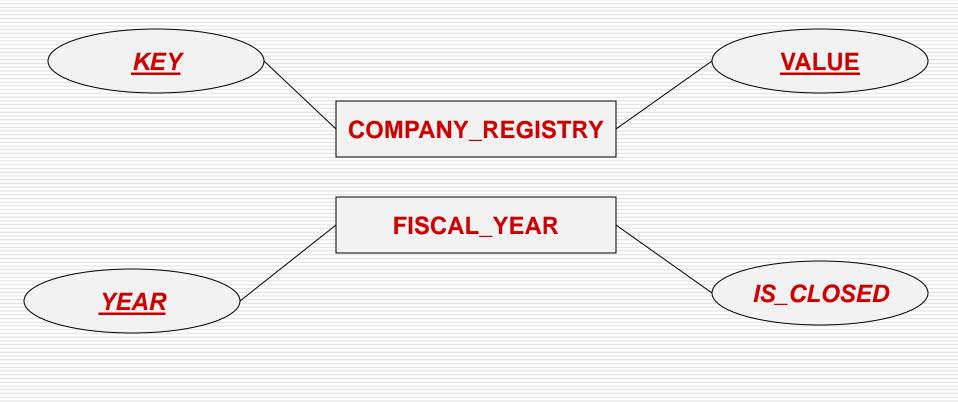




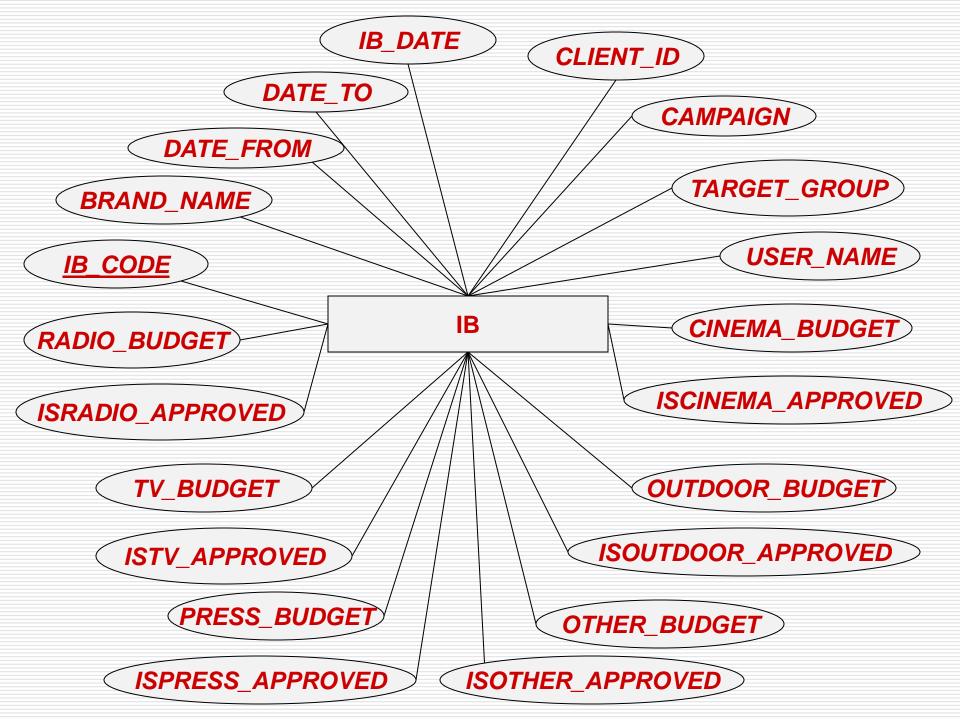


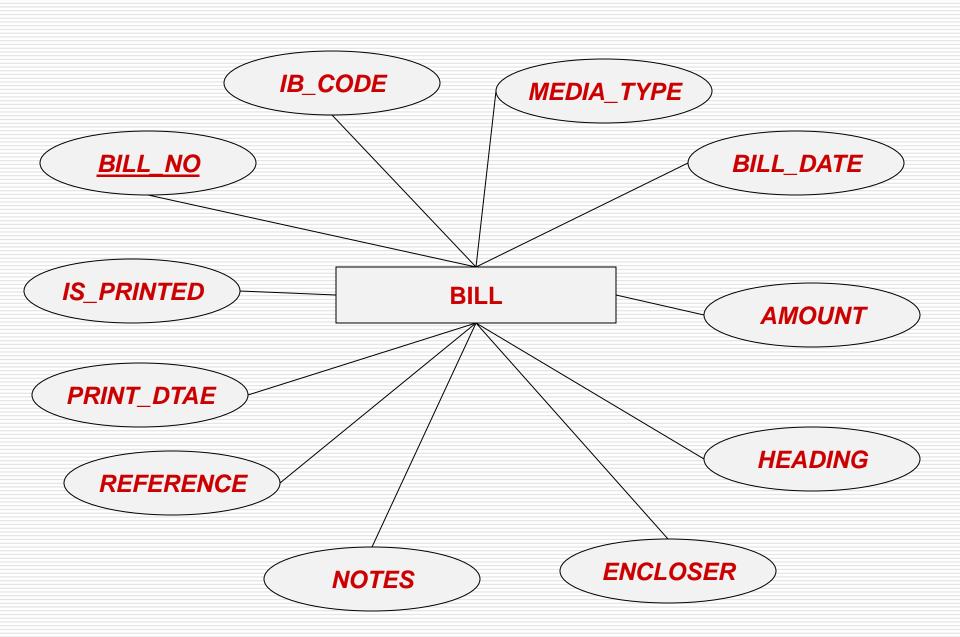


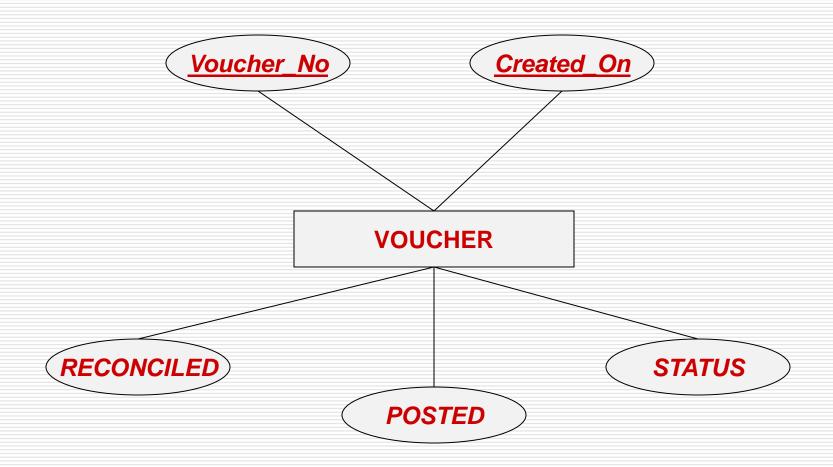


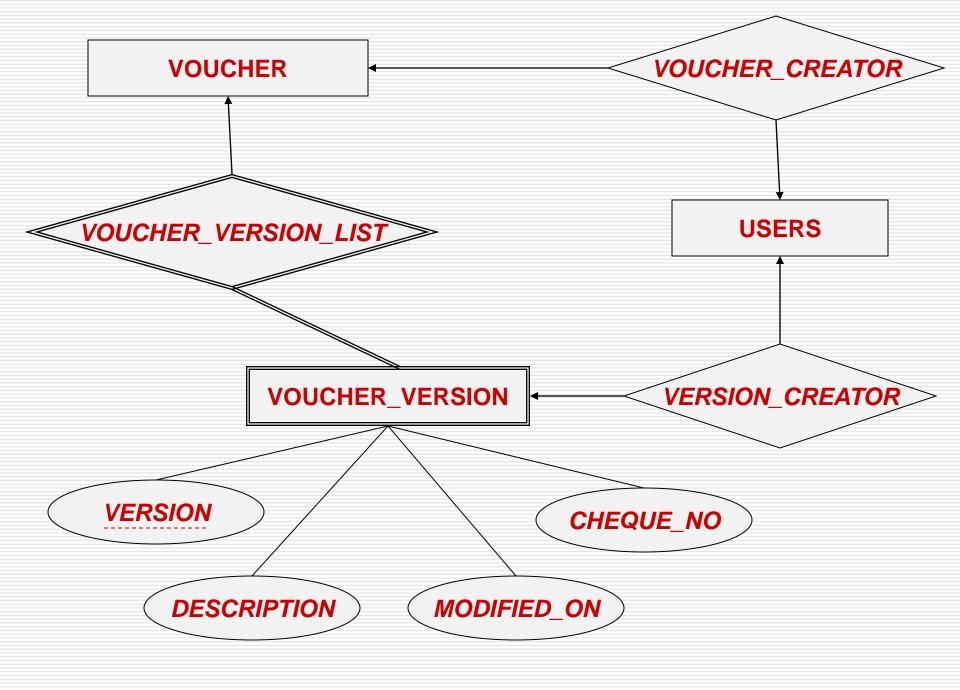


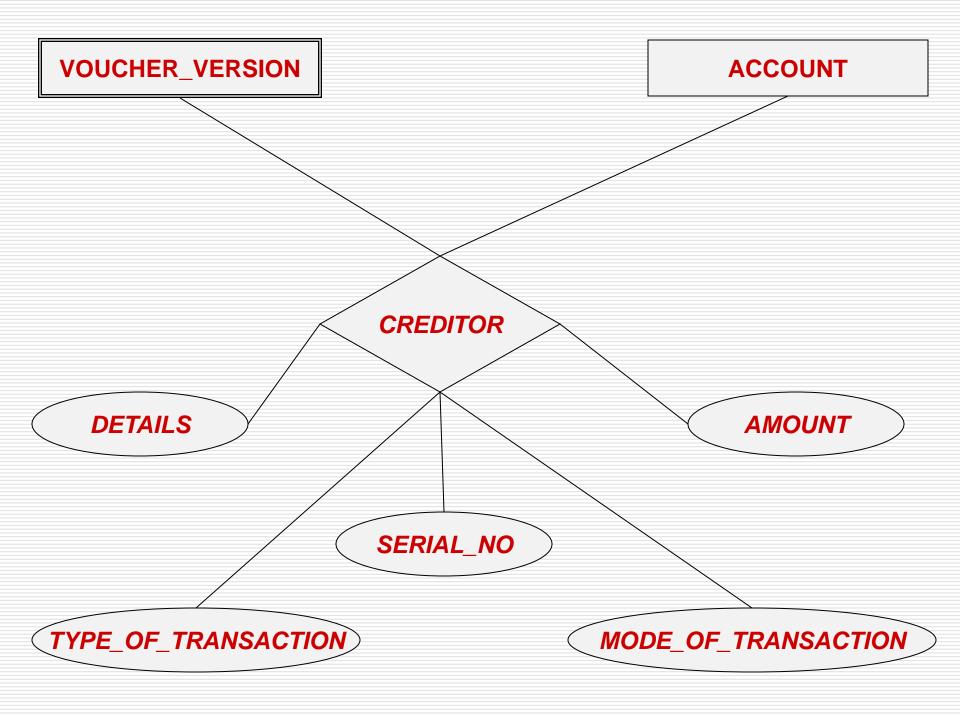


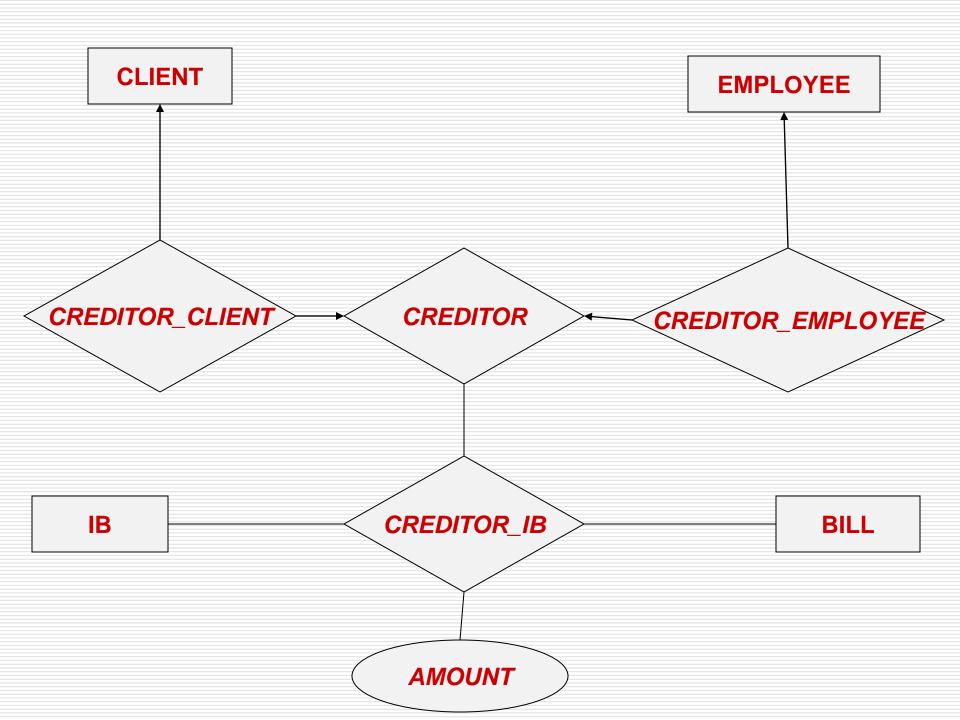


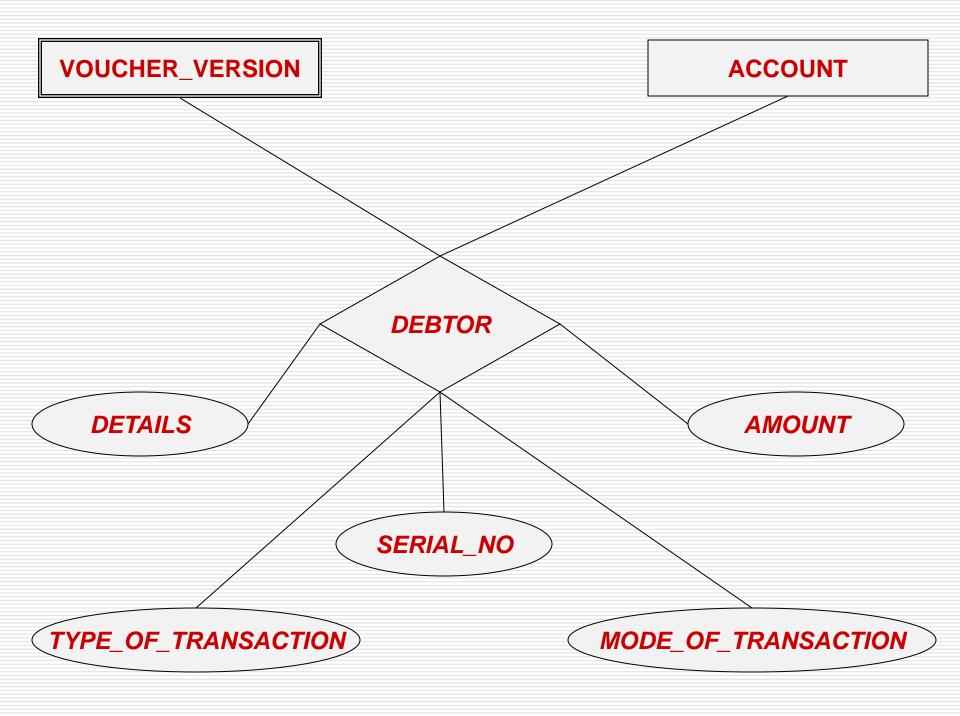


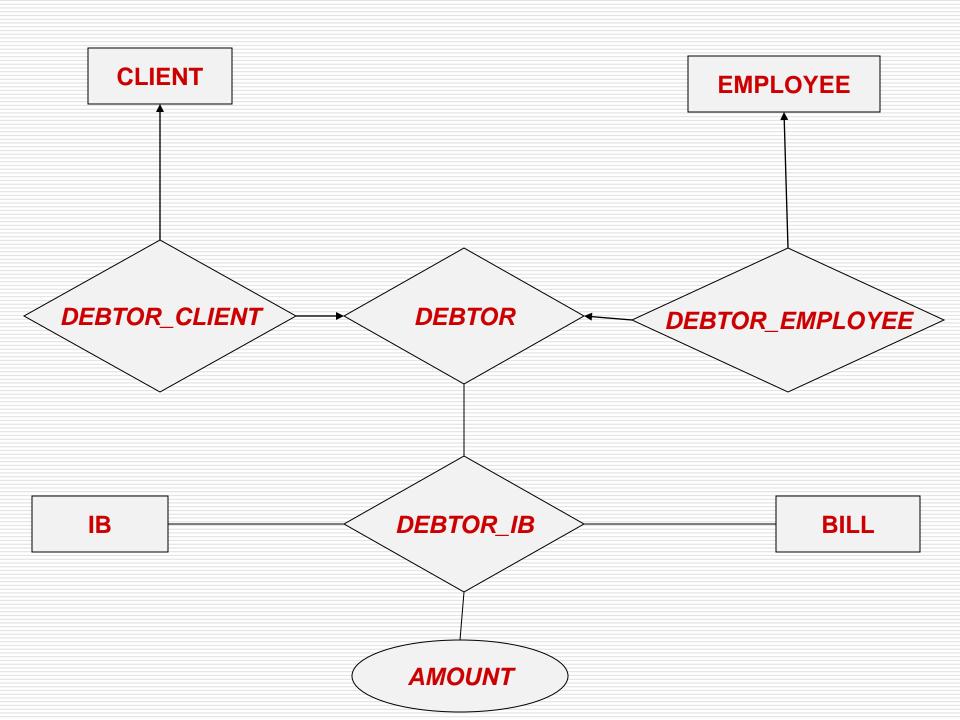












# Database Table Schema

### COMPANY\_PROFILE

NAME, USERNAME, PASSWORD, SERVICE, ADDRESS, PHONE, FAX, EMAIL, WEBSITE, LOGO

#### **EMPLOYEE**

EMP ID, EMP\_NAME

#### **UERS**

NAME, USER\_ID, PASSWORD, COMPANY\_NAME, STATUS

#### **CLIENT**

CLIENT ID, CLIENT\_NAME, ADRESS, PHONE, EMAIL, FAX, ACC\_CODE, CONTRACT\_PERSON, AGENCY\_COMMISSION, REMUNERATION\_MODE, USER\_NAME, CREATIVE\_AGENCY\_COMMISSION

### USERS\_LOG

<u>USER ID</u>, LOG\_IN\_TIME, LOG\_OFF\_TIME, COMPUTER NAME

#### IB

IB CODE, BRAND\_CODE, DATE\_FROM, DATE\_TO, IB\_DATE, CAMPAIGN, USER\_NAME, TV\_BUDGET, PRESS\_BUDGET, RADIO\_BUDGET, CINEMA\_BUDGET, OUTDOOR\_BUDGET, OTHER\_BUDGET, TARGET\_GROUP, CLIENT\_ID, ISTV\_APPROVED, ISPRESS\_APPROVED, ISRADIO\_APPROVED, ISCINEMA\_APPROVED, ISOUTDOOR\_APPROVED, ISOTHER\_APPROVED

#### **BILL**

<u>BILL NO</u>, IB\_CODE, MEDIA\_TYPE, BILL\_DATE, HEADING, ENCLOSER, NOTES, ISPRINTED, PRINT\_DATE, REFERENCE, AMOUNT

COMPANY\_REGISTRY

KEY, VALUE

FISCAL\_YEAR

YEAR, IS\_CLOSED

MODE\_OF\_PAYMENT

MODE\_DESCRIPTION

MODE\_OF\_RECEIVE

MODE\_DESCRIPTION

#### **ACCOUNT**

CODE, NAME, CREATED\_BY, HEAD\_CODE, VOUCHER\_ENTRY, CATEGORY, DOUBLE\_ENTRY\_SIDE, STATUS, CR, SPCR, SCCR, DR, SPDR, SCDR

#### **BUDGET**

CODE, FISCAL YEAR, AMOUNT

#### **VOUCHER**

VOUCHER NO, CREATED ON, CREATED BY STATUS, RECONCILED, POSTED

## **VOUCHER\_VERSION**

VOUCHER\_NO, CREATED\_ON, VERSION,
DESCRIPTION, MODIFIED\_ON, MODIFIED\_BY,
CHEQUE\_NO

#### **CREDITOR**

VOUCHER NO, CREATED ON, VERSION,

SERIAL NO, ACCOUNT\_CODE, DETAILS,

TYPE\_OF\_TRANSACTION, CLIENT\_ID, AMOUNT,

MODE\_OF\_TRANSACTION, EMPLOYEE\_ID

#### CREDITOR IB

VOUCHER NO, CREATED ON, VERSION,
SERIAL NO, IB CODE, BILL NO, AMOUNT

#### **DEBTOR**

VOUCHER NO, CREATED ON, VERSION,

SERIAL NO, ACCOUNT\_CODE, DETAILS,

TYPE\_OF\_TRANSACTION, CLIENT\_ID, AMOUNT,

MODE\_OF\_TRANSACTION, EMPLOYEE\_ID

#### DEBTOR IB

VOUCHER NO, CREATED ON, VERSION,
SERIAL NO, IB CODE, BILL NO, AMOUNT

# Conclusion

□ We tried to capture the main business process of Asiatic Accounting Systems through use cases. Then we designed E-R diagram from our use case analysis. Database Table Schema is also designed.

# THANK YOU