Table Design

▤ Tags

Role Table

Attribute	Constraint	Data Type	Description
Role_ID	Primary Key (PK)	INT	Unique identifier for each role
Role_Name	NOT NULL, UNIQUE	VARCHAR(50)	Name of the role (Admin, Manager, etc.)

User Table

Attribute	Constraint	Data Type	Description
User_ID	Primary Key (PK)	INT	Unique identifier for each user
Username	NOT NULL, UNIQUE	VARCHAR(50)	Unique username for the user
Email	NOT NULL, UNIQUE	VARCHAR(100)	User's email address
Password	NOT NULL	VARCHAR(64)	User's hashed password (assuming SHA-256)
Role_ID	Foreign Key (FK)	INT	Reference to the Role_ID in the Role table

Department Table

Attribute	Constraint	Data Type	Description
Dept_ID	Primary Key (PK)	INT	Unique identifier for each department
Name	NOT NULL	VARCHAR(100)	Name of the department

Event_Type Table

Attribute	Constraint	Data Type	Description
Event_Type_ID	Primary Key (PK)	INT	Unique identifier for each event type

Attribute	Constraint	Data Type	Description
Event_Type_Name	NOT NULL, UNIQUE	VARCHAR(100)	Name of the event type

Event Table

Attribute	Constraint	Data Type	Description
Event_ID	Primary Key (PK)	INT	Unique identifier for each event
User_ID	Foreign Key (FK)	INT	Reference to the User_ID in the User table
Name	NOT NULL	VARCHAR(100)	Name of the event
Event_Type_ID	Foreign Key (FK)	INT	Reference to the Event_Type_ID in the Event_Type table
Date	NOT NULL	DATE	Date of the event
Days	NOT NULL	INT	Duration of the event in days
Dept_ID	Foreign Key (FK)	INT	Reference to the Dept_ID in the Department table

Sub_Event Table

Attribute	Constraint	Data Type	Description
Sub_Event_ID	Primary Key (PK)	INT	Unique identifier for each sub-event
User_ID	Foreign Key (FK)	INT	Reference to the User_ID in the User table
Name	NOT NULL	VARCHAR(100)	Name of the sub-event
Event_Type_ID	Foreign Key (FK)	INT	Reference to the Event_Type_ID in the Event_Type table
Date	NOT NULL	DATE	Date of the sub-event
Time	NOT NULL	TIME	Time of the sub-event
Dept_ID	Foreign Key (FK)	INT	Reference to the Dept_ID in the Department table
Event_ID	Foreign Key (FK)	INT	Reference to the Event_ID in the Event table

Transaction_Nature Table

Attribute	Constraint	Data Type	Description
Nature_ID	Primary Key (PK)	INT	Unique identifier for transaction nature
Nature_Name	NOT NULL, UNIQUE	VARCHAR(50)	Name of the transaction nature

Payment_Mode Table

Attribute	Constraint	Data Type	Description
Mode_ID	Primary Key (PK)	INT	Unique identifier for payment mode
Mode_Name	NOT NULL, UNIQUE	VARCHAR(50)	Name of the payment mode

Transaction_Category Table

Attribute	Constraint	Data Type	Description
Transaction_Category_ID	Primary Key (PK)	INT	Unique identifier for transaction category
Category_Name	NOT NULL, UNIQUE	VARCHAR(50)	Name of the transaction category

Account_Category Table

Attribute	Constraint	Data Type	Description
Account_Category_ID	Primary Key (PK)	INT	Unique identifier for account category
Category_Name	NOT NULL, UNIQUE	VARCHAR(50)	Name of the account category

Individual_Event_Transaction Table

Attribute	Constraint	Data Type	Description
Transaction_ID	Primary Key (PK)	INT	Unique identifier for each transaction
User_ID	Foreign Key (FK)	INT	Reference to the User_ID in the User table

Attribute	Constraint	Data Type	Description
Event_ID	Foreign Key (FK)	INT	Reference to the Event_ID in the Event table
Amount	NOT NULL	DECIMAL(10,2)	Amount of the transaction
Nature_ID	Foreign Key (FK)	INT	Reference to the Nature_ID in the Transaction_Nature table
Mode_ID	Foreign Key (FK)	INT	Reference to the Mode_ID in the Payment_Mode table
Date	NOT NULL	DATE	Date of the transaction
Description	NULLABLE	TEXT	Description of the transaction
Bill_No	NULLABLE	VARCHAR(50)	Bill number
Party_Name	NULLABLE	VARCHAR(100)	Name of the party involved
Transaction_Category_ID	Foreign Key (FK)	INT	Reference to the Transaction_Category_ID
Account_Category_ID	Foreign Key (FK)	INT	Reference to the Account_Category_ID

Financial_Statement Table

Attribute	Constraint	Data Type	Description
Statement_ID	Primary Key (PK)	INT	Unique identifier for each financial statement
Event_ID	Foreign Key (FK)	INT	Reference to the Event_ID in the Event table
Statement_Name	NOT NULL, UNIQUE	VARCHAR(100)	Name of the financial statement

Profit_and_Loss Table

Attribute	Constraint	Data Type	Description
Statement_ID	Foreign Key (FK)	INT	Reference to the Statement_ID in Financial_Statement table

Attribute	Constraint	Data Type	Description
Particular	NOT NULL	VARCHAR(100)	Name of the particular
Nature_ID	Foreign Key (FK)	INT	Reference to the Nature_ID in the Transaction_Nature table
Amount	NOT NULL	DECIMAL(10,2)	Amount of the transaction

Balance_Sheet Table

Attribute	Constraint	Data Type	Description
Statement_ID	Foreign Key (FK)	INT	Reference to the Statement_ID in Financial_Statement table
Liabilities_and_Equities	NOT NULL	VARCHAR(100)	Liabilities and Equities section
Assets	NOT NULL	VARCHAR(100)	Assets section
Amount	NOT NULL	DECIMAL(10,2)	Amount of the assets/liabilities