ExpensiveManager ERD Text Design

Entity-Relationship Table Design

User - id (PK) - username - email - password - role

Category - id (PK) - name - user_id (FK, nullable: system-level category if null)

Group - id (PK) - name - created_by (FK to User)

GroupMember - id (PK) - group_id (FK) - user_id (FK) - joined_at

Expense - id (PK) - amount - description - date - user_id (FK: paid by) - category_id (FK) - group_id (FK, nullable) - created_at

ExpenseSplit - id (PK) - expense_id (FK) - paid_by (FK User) - paid_for (FK User) - amount

AuditLog (optional) - id (PK) - entity - operation - user_id (FK) - timestamp

Summary Table

Table	Columns
User	id, username, email, password, role
Category	id, name, user_id (nullable)
Group	id, name, created_by
GroupMember	id, group_id, user_id, joined_at
Expense	id, amount, description, date, user_id, category_id, group_id, created_at
ExpenseSplit	id, expense_id, paid_by, paid_for, amount
AuditLog	id, entity, operation, user_id, timestamp