DATABASE STRUCTURE

Key Entities:

1. Client:

Clients are individuals who subscribe to insurance packages, and they are linked to both agents and businesses.

- **Primary Key:** id

- **Attributes:**
    - First & Last Name
    - Ghana Card Number (ID)
    - Phone Number & Email
    - Password (for client login)
    - Referral Code (optional)
    - Date Registered

2. Agent:

Agents are responsible for onboarding and managing clients.

- **Primary Key:** id

- **Attributes:**
    - First & Last Name
    - Email & Password (for agent login)
    - Date Registered

3. Business:

Businesses are clients' workplaces, providing another dimension to their insurance coverage.

- **Primary Key:** id

- **Attributes:**
    - Business Name & Telephone Number
    - Business Description & Location
    - Insurance Coverage Start & End Dates

4. Package:

Packages define the terms of the insurance plan, including custom and default options for coverage.

- **Primary Key:** id

- **Attributes:**
    - Package Name
    - Yearly Premium Amount
    - Employee Coverage Limits (min/max)

- Coverage Amounts (for assets, liability, and life insurance)
- Package Description (array)
- Is Custom Package (boolean)

5. Package Subscription:

This entity represents the relationship between clients and their selected insurance packages.

- **Primary Key:** id
- **Attributes:**
  - Client ID & Business ID (foreign keys)
  - Package ID (foreign key)
  - Subscription Start & End Dates

Special Entities:

6. Employee:

Employees are tied to businesses, and some employees may also be clients.

- **Primary Key:** id
- **Attributes:**
  - Employee Name, Position, Email
  - Ghana Card Number (for ID verification)
  - Gender (enum: Male/Female)
  - Date Added (to the system)

7. Asset:

Assets represent the valuable items insured by clients.

- **Primary Key:** id
- **Attributes:**
  - Client ID (foreign key)
  - Asset Value

8. Claim:

Claims are submitted by clients for processing and resolution.

- **Primary Key:** id
- **Attributes:**
  - Claim Description
  - Claim Status (enum: Submitted, Under Review, Approved, Rejected)
  - Date Submitted

9. Claim Supporting Documents:

Documents attached to claims to support the client's case.

- **Primary Key:** id
- **Attributes:**
    - Document Name & Link

10. Admin:

The admin entity stores administrator information to manage the system. Each administrator is uniquely identified by an id.

- **Primary Key:** id
- **Attributes:**
    - Admin Email (varchar)
    - Admin Username (varchar)
    - Admin Password (varchar)

Admin Use Case:

Admins use this table to:

- Log into the system.
- Oversee system operations and maintain data integrity.

Entity Relationships:

Client ↔ Agent:

- Each client is associated with one agent.
- **Relation:** One-to-Many (1 agent → * clients).

Client ↔ Business:

- A client can be linked to one business.
- **Relation:** One-to-Many (1 business → * clients).

Business ↔ Employee:

- Businesses employ multiple employees, who may or may not be clients.
- **Relation:** One-to-Many (1 business → * employees).

Client ↔ Package Subscription:

- Clients can subscribe to one or more insurance packages.
- **Relation:** Many-to-Many (via the package_subscription table).

Client ↔ Claim:

- Clients can file multiple claims against their insurance.
- **Relation:** One-to-Many (1 client → * claims).

Flow of Operations:

1. **Client Registration:**

   o Clients provide personal details (including agent and business information).

   o Their account is created, and they can subscribe to insurance packages.

2. **Package Subscription:**

   o Clients can browse packages, choosing customized or standard packages for their needs.

3. **Employee Management:**

   o Businesses register their employees, linking them to their insurance coverage.

4. **Claims Process:**

   o Clients submit claims for events covered by their insurance.

   o Claims are supported by relevant documents and go through various stages (Submitted, Under Review, Approved, Rejected).

5. **Asset Coverage:**

   o Clients can add assets to be insured under their chosen package.

6. **Admin Management:**

   o Administrators manage system users, claims, and package settings to ensure smooth system operation.