Group Employee Insurance

The **Group Employee Insurance Management System** is a full-stack web application developed to simulate a real-world corporate (B2B) insurance platform. The system enables companies to purchase and manage group insurance policies for their employees, while allowing the insurance provider to oversee policy administration, recommendations, commission tracking, billing, and claim processing through structured role-based access control.

The platform operates with four primary roles: **Admin, Agent, Claims Manager, and Customer (Company HR)**. All users register through the system with the default role assigned as Customer. A predefined Admin user manages role assignments and is responsible for creating Agent and Claims Manager accounts. Upon authentication, users are redirected to dashboards based on their assigned roles.

The system provides nine predefined insurance plans structured across three professional tiers: **Essential, Enhanced, and Enterprise**. Each tier contains three levels: **Base, Plus, and Pro**. The coverage structure is progressive:

- Base – Health coverage only

- Plus – Health + Life coverage

- Pro – Health + Life + Accident coverage

Policy tiers differ in coverage limits, life multipliers, accident coverage, and premium rates.

Customers can view all available plans and either directly purchase a suitable policy or submit a recommendation request by providing details such as company size and domain. Upon registration, each company is assigned to a specific Agent who acts as their relationship manager. Based on the submitted details, the assigned Agent recommends appropriate plans from the predefined policy set. Agents earn commission based on successful policy purchases made by their assigned companies.

Companies can add employees with details such as name, email, annual salary, role, and nominee information. Employees may be added either before or after policy purchase. As long as the company has an Active policy, all active employees belonging to that company are automatically covered under the policy and become eligible to raise claims.

Once a policy is selected and the number of employees is entered, the system calculates the total annual premium based on a per-employee premium rate. Upon confirming payment, the policy status is updated to Active, and the start and expiry dates are generated with a validity period of one year. An invoice containing premium details and policy validity dates is generated and stored in the customer's profile. A company can maintain only one active policy at a time.

The claims module supports three structured claim types based on policy coverage:

- **Health Claims** – Raised for hospital expenses and allowed multiple times within the employee's remaining health coverage balance.

- **Life Claims** – Calculated as *Salary × Life Multiplier* defined in the policy. Life claims are allowed only once per employee and result in the employee being marked as deceased and deactivated from further coverage.

- **Accident Claims** – Supported for permanent total or partial disability. Total disability results in full accident coverage payout, while partial disability is calculated based on the defined disability percentage.

Claims are submitted by the Customer on behalf of employees and cannot be modified after submission. Claims are reviewed and approved or rejected by the Claims Manager. Payout calculations are performed automatically by the system to ensure accuracy and prevent manipulation. Coverage balances are updated accordingly upon approval.

The Admin role provides system-wide oversight, including user management, policy management, employee monitoring (filterable by company), claim auditing, and overall platform supervision.

Overall, this project simulates a structured corporate insurance workflow incorporating role-based authentication, tiered product design, premium calculation, invoice generation, recommendation handling, commission tracking, employee lifecycle management, and a controlled claim processing system.

Clear Role Responsibilities

Admin — System Administrator

Admin represents the insurance company's internal control authority.

What Admin DOES:

User Management

- Create Agent accounts
- Create Claims Manager accounts
- Delete users (if required)
- View all registered customers

Policy Management

- Create predefined insurance policies
- Edit policy details (coverage, multipliers, premium rate)
- Activate/Deactivate policies

System Monitoring

- View all companies
- View all employees (filter by company)
- View all policies
- View all claims
- View reports and system analytics

Agent — Assist Customer

What Agent DOES:

Customer Handling

- View assigned companies
- View company details
- View employee count

Recommendation Handling

- On recommendation requests
- Recommend 3 suitable policies
- Add remarks or suggestions

Sales & Commission

- View purchased policies of assigned companies
- Earn commission on successful policy purchases
- View commission history

Claims Manager — Claim Processing Officer

Claims Manager is responsible for claim validation and decision-making.

What Claims Manager DOES:

Claim Review

- View all submitted claims
- View claim details and uploaded documents
- View employee salary and policy coverage
- View remaining coverage balance

Decision Making

- Approve claim
- Reject claim
- Add remarks

Customer (Company HR) — Policy Holder

Customer represents the company purchasing insurance.

What Customer DOES:

Registration

- Register company account
- Automatically gets assigned an Agent

Employee Management

- Add employees
- Edit employee details
- Remove employees (if allowed)
- Add salary and nominee details

Policy Purchase

- View available policies
- Request recommendation
- Select policy
- Enter employee count
- View premium calculation
- Confirm payment
- View invoice
- Maintain one active policy

Claim Handling

- Select employee
- Select claim type
- Upload documents
- Submit claim
- Track claim status

Customer (Company HR) — Policy Holder

Customer represents the company purchasing insurance.

What Customer DOES:

Registration

- Register company account
- Automatically gets assigned an Agent

Employee Management

- Add employees
- Edit employee details
- Remove employees (if allowed)
- Add salary and nominee details

Policy Purchase

- View available policies

- Request recommendation
- Select policy
- Enter employee count
- View premium calculation
- Confirm payment
- View invoice
- Maintain one active policy

Claim Handling

- Select employee
- Select claim type
- Upload documents
- Submit claim
- Track claim status

Overall

Admin → Controls the platform

Agent → Handles company relationship and sales

Claims Manager → Validates and processes claims

Customer → Purchases policy and manages employees

Complete Project Flow

PHASE 1 – User Setup & Role Assignment

Step 1 – Admin Setup

- Admin account is predefined (seeded in system).
- Admin creates:
  - Agent accounts
  - Claims Manager accounts

Admin controls user and policy management.

Step 2 – Company Registration

- A company registers as Customer.
- On registration:
  System automatically assigns an Agent to that company.

- The assigned Agent becomes responsible for that company.

PHASE 2 – Employee Management

Step 3 – Add Employees

Customer adds employees with:

- Name
- Email
- Annual Salary
- Role
- Nominee details

Employees can be added:

- Before policy purchase
- After policy purchase

As long as the company has an **Active policy**, all active employees are covered.

PHASE 3 – Policy Selection & Recommendation

There are 9 predefined policies:

Tiers:

- Essential
- Enhanced
- Enterprise

Levels:

- Base (Health only)
- Plus (Health + Life)
- Pro (Health + Life + Accident)

Step 4 – Policy Viewing

Customer can:

- Directly view and select a policy
   OR
- Request recommendation

Step 5 – Recommendation Flow (If Requested)

1. Customer submits recommendation request (employee size + domain).
2. Assigned Agent reviews request.
3. Agent selects 3 suitable plans.

4. Agent adds remarks.
5. System sends notification to Customer.
6. Customer views recommended plans.
7. Customer selects one plan.

PHASE 4 – Premium Calculation & Policy

Step 6 – Premium Calculation

Customer:

- Enters number of employees.

System calculates:

Premium per employee × Number of employees = Total Annual Premium

Step 7 – Confirm Payment

Customer clicks Confirm & Pay.

System:

- Updates policy status → Active
- Sets Start Date
- Sets Expiry Date (1 year validity)
- Generates Invoice
- Stores invoice in customer profile

Rule:
 A company can have only one Active policy at a time.

PHASE 5 – Claim Raising

Step 8 – Raise Claim

Customer:

1. Selects Active Policy
2. Selects Employee
3. Selects Claim Type
4. Views coverage details
5. Uploads documents
6. Submits claim

Once submitted: Claim cannot be edited.

Status = Submitted

PHASE 6 – Claim Processing

Step 9 – Claims Manager Review

Claims Manager:

- Views submitted claims
- Reviews documents
- Approves or rejects

System calculates payout automatically.

PHASE 7 – Claim Settlement Logic

🏥 Health Claim

- Deduct from remaining health coverage.

💰 Life Claim

- Payout = Salary × Life Multiplier.
- Employee marked as deceased.
- Employee deactivated.

🚑 Accident Claim

- Total disability → Full accident coverage.
- Partial disability → Coverage × Disability %.

Step 10 – Notification

After decision:

- Customer receives notification.
- Claim status updated.

Full System Lifecycle

Admin Setup
→ Company Registers
→ Agent Assigned
→ Employees Added
→ Policy Selected
→ Premium Calculated
→ Payment Confirmed
→ Policy Activated
→ Claims Raised
→ Claims Approved/Rejected