

## Problem Statement :- Expense Management

Companies often struggle with **manual expense reimbursement processes** that are time-consuming, error-prone, and lack transparency. There is no simple way to:

- Define **approval flows** based on thresholds.
- Manage **multi-level approvals**
- Support **flexible approval rules**

## Core Features

### Authentication & User Management

- On **first login/signup**:
  - A new **Company** (in the environment selected country's currency should **get set**) and **Admin User** are auto-created.
- Admin can:
  - Create **Employees & Managers**.
  - Assign and change roles → *Employee, Manager*.
  - Define **manager relationships** for employees.

### Expense Submission (Employee Role)

- Employee can:
    - Submit expense claims (Amount [can be different from company's currency], Category, Description, Date) etc
    - View their expense history (Approved, Rejected).
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### Approval Workflow (Manager/Admin Role)

**NOTE: The expense is first approved by his manager, if the IS MANAGER APPROVER field is checked.**

- When **multiple approvers** are assigned, Admin can define their **sequence**.
  - Example:
    - Step 1 → Manager
    - Step 2 → Finance
    - Step 3 → Director

- Expense moves to the **next approver (approval request generated in next approver's account) only after the current one approves or rejects.**
- Managers can:
  - View expenses waiting for approval.
  - Approve/Reject with comments.

## Conditional Approval Flow

- Approval Rule supports:
  - Percentage rule:** e.g., If 60% of approvers approve → Expense approved.
  - Specific approver rule:** e.g., If CFO approves → Expense auto-approved.
  - Hybrid rule:** Combine both (e.g., 60% OR CFO approves).

There can be a combination of both flows(Multiple approvers + Conditional) together as well.

## Roles & Permissions

Role	Permissions
<b>Admin</b>	Create company (auto on signup), manage users, set roles, configure approval rules, view all expenses, override approvals
<b>Manager</b>	Approve/reject expenses (amount visible in company's default currency), view team expenses, escalate as per rules
<b>Employee</b>	Submit expenses, view their own expenses, check approval status

### Additional features :

- OCR for receipts** (auto-read)
  - Employees can just scan a receipt and using OCR algorithm the expense gets autogenerated with all necessary fields like amount, date, description, expense lines, expense type, name of restaurant(for e.g) where this expense was done.

API: For country and their currency -> <https://restcountries.com/v3.1/all?fields=name,currencies>

For currency conversions: [https://api.exchangerate-api.com/v4/latest/{BASE\\_CURRENCY}](https://api.exchangerate-api.com/v4/latest/{BASE_CURRENCY})

**Mockup** - <https://link.excalidraw.com//65VNwvy7c4X/4WSLZDTrhkA>