

ERD Breakdown for Virtual Complaint Box System

1. Companies:

- company_id (PK)
- company_name
- contact_email
- industry_type
- address

2. Customers:

- customer_id (PK)
- customer_name
- email
- phone
- address

3. Categories:

- category_id (PK)
- category_name (e.g., bribery, fraud, operational issue)

4. Complaints:

- complaint_id (PK)
- company_id (FK to Companies)
- customer_id (FK to Customers)
- category_id (FK to Categories)
- severity_level (low, medium, high)

- status (open, resolved, closed)
- complaint_details
- created_at
- escalation_level
- is_anonymous
- language_preference

5. Complaint Responses:

- response_id (PK)
- complaint_id (FK to Complaints)
- response_text
- response_time
- company_agent_id (FK to Company Agents)
- status_update

6. Attachments:

- attachment_id (PK)
- complaint_id (FK to Complaints)
- file_path
- file_type

7. User Feedback:

- feedback_id (PK)
- complaint_id (FK to Complaints)
- feedback_text
- rating (numeric or stars)
- submitted_at

8. Complaint History:

- history_id (PK)
- complaint_id (FK to Complaints)
- status_change (open, resolved, escalated)
- changed_at
- changed_by

9. Company Agents:

- agent_id (PK)
- company_id (FK to Companies)
- agent_name
- email
- role

10. Complaint Assignments:

- assignment_id (PK)
- complaint_id (FK to Complaints)
- agent_id (FK to Company Agents)
- assigned_at

11. Complaint Tags:

- tag_id (PK)
- tag_name

12. Complaint_Tag_Map (Junction table for many-to-many relationship):

- complaint_id (FK to Complaints)

- tag_id (FK to Complaint Tags)

13. SLA Tracking:

- sla_id (PK)
- complaint_id (FK to Complaints)
- sla_deadline
- sla_met (boolean)

14. Audit Logs:

- audit_id (PK)
- complaint_id (FK to Complaints)
- action_taken
- action_time
- performed_by

15. Notification System:

- notification_id (PK)
- complaint_id (FK to Complaints)
- notification_type (email, SMS)
- notification_time
- sent_to

16. Post-Resolution Satisfaction Survey:

- survey_id (PK)
- complaint_id (FK to Complaints)
- satisfaction_rating (1-5 scale)
- comments

- submitted_at

Relationships:

- Complaints have a many-to-one relationship with Companies, Customers, and Categories.
- Complaints have a one-to-many relationship with Complaint Responses, Attachments, Complaint History, User Feedback, Complaint Assignments, Audit Logs, SLA Tracking, Post-Resolution Satisfaction Survey, and Notifications.
- Complaints have a many-to-many relationship with Complaint Tags via the Complaint_Tag_Map table.
- Company Agents handle complaints, and each Complaint Assignment links a complaint to a specific agent.
- Audit Logs and Complaint History track actions and status changes over time.