# Deepfake Case Management CRM – Incident Reporting & Investigation System

#### ■ Problem Statement

Social media platforms, governments, and organizations face increasing challenges due to deepfake content.

Victims find it hard to report incidents.

Investigations are slow and uncoordinated.

Evidence tracking and approvals are manual.

No centralized dashboards exist to monitor case progress or trends.

■ Solution: Implement Salesforce CRM to create a system for reporting, tracking, and resolving deepfake incidents through automation, integrations, and dashboards.

#### Use Cases

- Incident Reporting Users report suspected deepfake content through a portal/web form.
- Case Assignment & Investigation Auto-assign cases to analysts based on workload/region.
- Evidence Management Store uploaded videos/images as evidence records.
- Integration with AI Deepfake Detection Tools API integration with external ML models.
- Reporting & Dashboards Track reported cases, resolution times, escalations, and analyst performance.

## Phase 1: Problem Understanding & Industry Analysis

- Requirement Gathering Collect business needs like reporting, AI verification, and evidence tracking.
- Stakeholder Analysis Identify roles: reporters, analysts, managers, compliance officers.
- Business Process Mapping Define flow: Report  $\rightarrow$  Investigation  $\rightarrow$  AI check  $\rightarrow$  Closure.
- Industry-specific Use Case Analysis Study digital forensics and media handling of deepfakes.
- AppExchange Exploration Explore compliance/security apps for integration.

#### Phase 2: Org Setup & Configuration

- Salesforce Editions Use Enterprise Edition for advanced automation.
- User Setup & Licenses Create licenses for Analysts, Managers, and Reporters.
- ullet Profiles & Roles Define permissions and hierarchy (Reporter o Analyst o Manager o Compliance).
- Permission Sets Grant extra access like running AI checks.
- OWD & Sharing Rules Keep evidence private and controlled by hierarchy.

# Phase 3: Data Modeling & Relationships

- Custom Objects Deepfake Case, Evidence, Investigation Report.
- Fields Capture incident details like URL, AI score, and date reported.
- Record Types Separate Image vs Video Deepfake cases.
- $\bullet \ \text{Relationships} \text{Case} \leftrightarrow \text{Evidence (One-to-Many)}, \ \text{Case} \leftrightarrow \text{Report (One-to-One)}.$
- Schema Builder Visualize case management relationships.

#### Phase 4: Process Automation (Admin)

- Validation Rules Case cannot close without evidence.
- Flows Auto-assign cases and notify reporters.

- Approval Process Manager approval required before closure.
- Email Alerts Notify reporters of status updates.
- Custom Notifications Push alerts for escalated cases.

#### Phase 5: Apex Programming (Developer)

- Triggers Call Al detection API after case creation.
- Batch Apex Run bulk verification jobs daily.
- Queueable Apex Process evidence asynchronously.
- Scheduled Apex Generate weekly compliance reports.
- Exception Handling Log failed API responses.

#### Phase 6: User Interface Development

- Lightning App 'Deepfake Case Management'.
- Record Pages Display AI results and case details.
- Tabs Cases, Evidence, Reports.
- LWC Evidence preview and Run Al Check button.
- Navigation Service Redirect to investigation reports.

#### Phase 7: Integration & External Access

- REST API Connect with AI detection service.
- Salesforce Connect Link with law enforcement databases.
- Named Credentials Secure storage of API keys.
- OAuth Ensure secure API access.
- Remote Site Settings Whitelist Al detection domain.

#### Phase 8: Data Management & Deployment

- Data Import Wizard Upload sample cases.
- Data Loader Bulk upload evidence records.
- Duplicate Rules Prevent duplicate incident reporting.
- Change Sets Move automation rules to production.
- VS Code & SFDX Source control for deployments.

#### Phase 9: Reporting, Dashboards & Security Review

- Reports Track cases by severity and analyst.
- Dashboards Monitor volume, resolution time, and escalations.
- Dynamic Dashboards Role-based insights.
- Field Level Security Restrict evidence access.
- Audit Trail Track case status and approvals.

## Phase 10: Final Presentation & Demo Day

- Live Demo Show complete workflow (report  $\rightarrow$  assign  $\rightarrow$  AI check  $\rightarrow$  closure).
- Pitch Presentation Demonstrate business impact.
- Feedback Collection From analysts and managers.
- Documentation Admin/user guide for handoff.
- Portfolio Showcase Publish as an advanced Salesforce project.