Fraud Detection System using Salesforce – Project Report

Phase 1: Project Planning

What was done:
- Identified the need for a system to track and manage fraudulent transactions.
- Defined objectives: record fraud cases, automate detection workflows, and visualise fraud trends using dashboards.

Why:
To provide organisations with a Salesforce-based tool that ensures faster fraud detection, alerts, and decision-making.

Phase 2: Salesforce Setup

What was done:
- Created a Fraud Detection App in Salesforce.
- Created a custom object Fraud Case with fields like Transaction ID, Transaction Amount, Date & Time of Transaction, Customer ID, Location, Device Info, Fraud Type, Case Status, Fraud Case Name, and Risk Score.
- Created a Fraud Case Tab inside the app for easy navigation.

Why:
To store and manage all suspicious transaction details in one place.

Phase 3: UI Customization

What was done:
- Designed record page layouts for the Fraud Case object.
- Added fields in logical sections (Transaction Details, Customer Info, Device Info, Fraud Analysis).
- Created navigation items in the app: Fraud Cases, Reports, and Dashboards.

Why:
To make the user interface simple and structured for fraud analysts.

Phase 4: Process Automation (Admin)

What was done:
- Created Validation Rules (e.g., prevent negative amounts).

- Configured Workflow Rules and Process Builder to update Status automatically for high-value transactions.
- Designed Approval Process for high-risk cases requiring manager review.
- Configured Email Alerts to notify analysts on new fraud cases.
- Created Tasks to assign fraud investigation activities.

Why:
To reduce manual work, improve accuracy, and ensure timely fraud response.

Phase 5: Apex Programming (Skipped / Minimal)

What was done:
- Did not implement custom Apex triggers or classes due to project scope and time.
- Relied on point-and-click automation tools (Flows, Process Builder, Validation Rules).

Why:
The project could be implemented fully with admin tools without requiring Apex.

Phase 6: User Interface Development

What was done:
- Used Lightning App Builder to design record pages for Fraud Cases.
- Configured Home Page to include Fraud Dashboard.
- Added Tabs for easy navigation: Fraud Cases, Reports, Dashboards.

Why:
To provide a user-friendly interface to fraud analysts.

Phase 7: Integration & External Access

What was done:
- No external API integrations were implemented.
- Only Salesforce standard email alert functionality was used for notifications.

Why:
Project scope was limited to Salesforce internal processes.

Phase 8: Data Management & Deployment

What was done:
- Created sample Fraud Case records manually (2 for each fraud type: Credit Card Fraud, Identity Theft, Phishing, Account Takeover).
- Ensured all records had Transaction ID, Amount, Date, Fraud Type, and Case Status.
- Used Reports and Dashboards to analyze fraud trends.

Why:
To prepare demo data that shows how the system works.

Phase 9: Reporting & Dashboards

What was done:
- Created a Summary Report grouped by Fraud Type.
- Built a Fraud Monitoring Dashboard with:
  - Bar Chart – Total Transaction Amount by Fraud Type
  - Pie Chart – Distribution of Fraud Cases by Status

Why:
To give management a visual overview of fraud cases and trends.

Phase 10: Final Presentation & Demo

What was done:
- Recorded a demo video showcasing:
  - App and object setup
  - Creating fraud cases
  - Automation in action (status updates, approval, alerts)
  - Dashboards and reports for fraud monitoring

Why:
To demonstrate the system's functionality and usability for evaluation.

Final Overview

The Fraud Detection System is a Salesforce-based application that tracks suspicious transactions, automates workflows for fraud review, and provides dashboards for analysis. It was implemented using Salesforce Admin features like custom objects, fields, automation rules, approval processes, and dashboards. The system helps organizations detect and respond to fraudulent activities quickly and accurately, without requiring heavy coding.