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# INTELLIGENT FRAUD DETECTION & RISK SCORING SYSTEM

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Use Case Diagram



Business Analyst Project Report  
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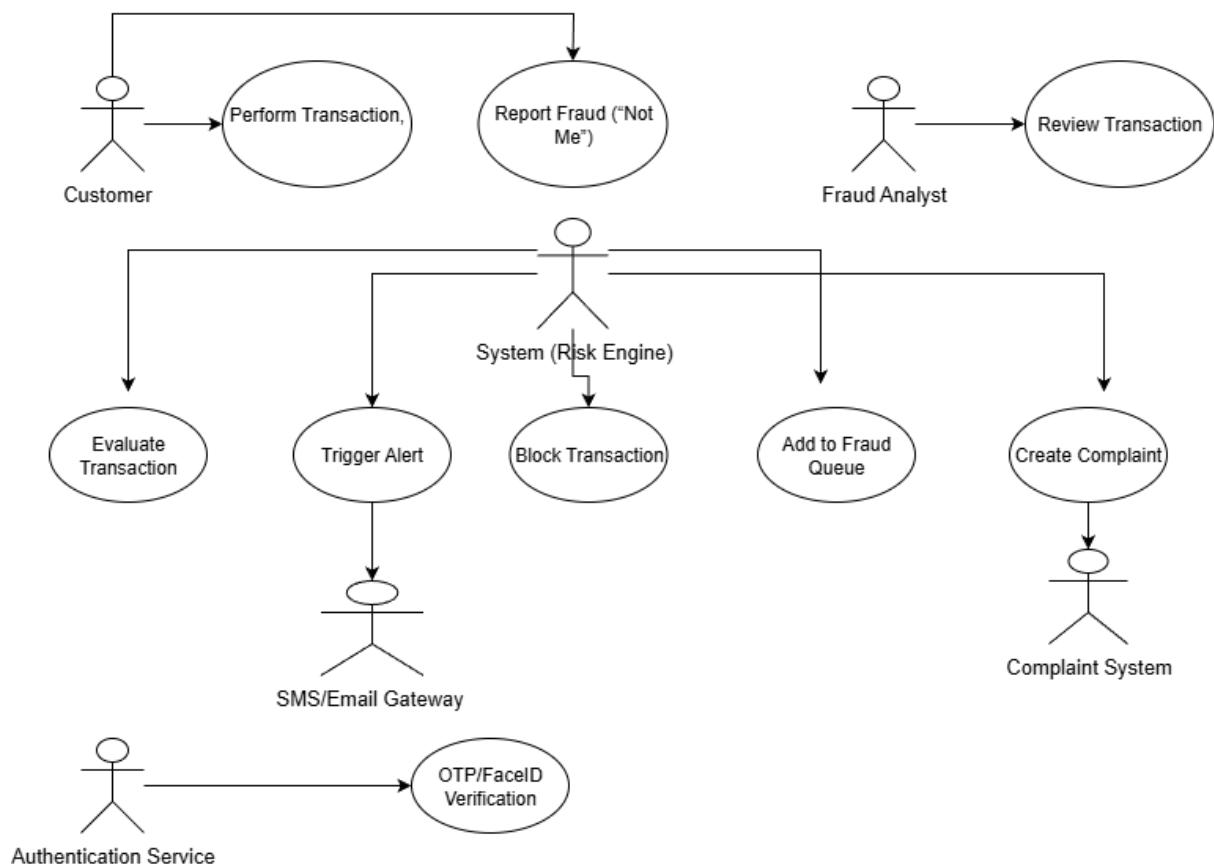
## USE CASE DIAGRAM – DESCRIPTION

### Intelligent Fraud Detection & Risk Scoring System

This document contains:

1. Text Description of the Use Case Diagram
  2. Placeholder to attach the visual Use Case Diagram (draw.io)
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#### 1. Visual Use Case Diagram



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#### 2. Text Description of Use Case Diagram

##### Actors

1. **Customer** – Initiates transactions, receives alerts, reports fraud
2. **Fraud Analyst** – Reviews flagged transactions
3. **System (Risk Engine)** – Evaluates transactions, assigns risk score
4. **SMS/Email Gateway** – Sends notifications
5. **Authentication Service (OTP/FaceID)** – Validates user identity
6. **Complaint System** – Stores fraud complaint tickets

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## **Use Cases**

### **1. Perform Transaction (Customer)**

- Customer initiates a transaction
- System receives and evaluates it

### **2. Evaluate Transaction (System)**

- System collects data (amount, device, IP, GPS)
- Applies fraud rules
- Calculates risk score

### **3. Trigger Alert (System → SMS/Email Gateway)**

- System sends a warning or block alert to the customer

### **4. OTP/FaceID Verification (Authentication Service)**

- System requests OTP
- Customer enters OTP
- Service validates the OTP

### **5. Block Transaction (System)**

- If risk score is 90 or above, the system blocks the transaction immediately

### **6. Report Fraud ("Not Me") – Customer**

- Customer reports suspicious activity
- System blocks card
- System generates fraud complaint

### **7. Add to Fraud Queue (System → Fraud Analyst)**

- High-risk or blocked transactions appear in the Fraud Queue

### **8. Review Transaction (Fraud Analyst)**

- Analyst reviews details
- Approves or rejects the transaction

### **9. Create Complaint (System → Complaint System)**

- Auto-generated complaint with a unique complaint ID

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## **3. Use Case Relationships**

<b>Relationship</b>	<b>Explanation</b>
Customer → Perform Transaction	Primary interaction
System → Evaluate Transaction	Core fraud logic
System → Authentication Service	Handles OTP/FaceID verification
System → SMS/Email Gateway	Sends alerts and notifications
System → Fraud Queue	Routes high-risk transactions
Fraud Analyst → Review Transaction	Manual investigation workflow
System → Complaint System	Auto complaint creation