

# AUTOMATED CLAIMS PROCESS USING WEATHER-BASED TRIGGERS

## 1. Introduction

The Automated Claims Process is a smart insurance solution designed to automatically trigger and process claims for delivery partners based on real-time weather conditions. This system reduces manual intervention, ensures faster payouts, and enhances user experience by leveraging API-based automation.

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## 2. Objective

- To automate claim processing based on rainfall data
  - To provide quick financial support to delivery partners during heavy rain
  - To eliminate manual claim requests and approvals
  - To ensure accurate and location-based claim validation
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## 3. System Overview

The system continuously monitors weather data using an external API. Based on predefined rainfall thresholds, it identifies eligible delivery partners in a specific location and automatically processes claims.

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## 4. Workflow Explanation

### Step 1: Weather Data Monitoring

- The system checks weather conditions every **10 minutes**
  - Uses **OpenWeatherMap API** to fetch rainfall data
  - Focus area: **Koramangala region**
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### Step 2: Rainfall Condition Check

- If rainfall is  $\geq 35\text{mm}$  → **Heavy Rain Detected**
  - If rainfall is  $< 35\text{mm}$  → **No Claim Triggered**
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### Step 3: Identify Active Delivery Partners

- The system fetches **active delivery partners** in the affected area
  - Example: Rider details (Name, ID, Contact)
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### Step 4: Risk Evaluation

- Heavy rain → Marked as **Risk Zone**
  - Low rain → Marked as **Low Risk**
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### Step 5: Claim Automation

- If conditions match:
    - Claim is automatically triggered
    - Example: ₹450 payout
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### Step 6: Location Verification (GPS Check)

- System verifies user location using GPS
  - If location matches → Claim approved
  - If mismatch → Claim skipped
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### Step 7: Automatic Payout

- Approved claims are:
    - **Credited instantly** to the user
    - Notification sent to delivery partner
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### Step 8: Dashboard Update

- System updates user dashboard with:
  - Claim amount
  - Date of payout
  - Plan details

- Total protection amount
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## 5. Key Features

- Real-time weather monitoring
  - Fully automated claim processing
  - GPS-based fraud prevention
  - Instant payout system
  - Dashboard tracking and analytics
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## 6. Benefits

- Faster claim settlement
  - Improved trust among delivery partners
  - Reduced manual workload
  - Accurate and transparent system
  - Scalable for multiple locations
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## 7. Technologies Used

- **Frontend:** HTML, CSS, JavaScript
  - **Backend:** Node.js / Java
  - **API Integration:** OpenWeatherMap API
  - **Database:** SQL / MongoDB
  - **Location Tracking:** GPS Services
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## 8. Conclusion

The Automated Claims Process system provides an efficient, reliable, and scalable solution for insurance claim handling. By integrating real-time weather data and automation, it ensures timely financial assistance to delivery partners while minimizing operational complexity.