**Case Study – Ethical Email Automation Bot (UIPath No-Code Version)**

### **📚 Project Overview**

This project implements a no-code version of the Ethical Email Automation Bot using UIPath Studio. It automates Gmail email processing, categorization, and auto-replies while ensuring ethical rules are followed — without writing code.

### **⚖️ Ethical Objective**

* Avoid auto-replies to spam, marketing, or non-consented senders
* Reply only once per sender per run
* Maintain traceability and transparency with response logs

### **🔧 Tools Used**

* **UIPath Studio** (Community Edition)
* **Gmail Scope** & **IMAP/SMTP** integration
* Excel Logging

### **📊 Project Steps & Workflow**

| **Step** | **Activity** | **Description** |
| --- | --- | --- |
| 1 | Gmail Application Scope | Authenticate Gmail access |
| 2 | Get Mail Messages | Retrieve unread messages from Inbox |
| 3 | Switch/If Conditions | Classify messages by keywords |
| 4 | Regex Matches | Filter out blocked senders |
| 5 | Send SMTP Mail Message | Send templated response based on category |
| 6 | Write to Excel | Log reply actions and sender info |

### **📄 Email Categories & Templates**

| **Category** | **Template** |
| --- | --- |
| Job | "Thank you for your interest. We'll get back to you." |
| Inquiry | "Thanks for your question. We'll respond shortly." |
| General | "Thanks for reaching out." |

### **⚠️ Challenges & Fixes**

| **Challenge** | **Fix** |
| --- | --- |
| Avoiding multiple replies | Tracked sender email in DataTable or Dictionary |
| Spam filtering in no-code | Used Regex activity in UIPath |
| Gmail 2FA login | Used App Password with SMTP configuration |

### **🌌 Outcome**

* Zero-code ethical automation solution using Gmail
* Reduced unnecessary responses to non-consensual senders
* Audit trail maintained via Excel logs