Infogenx

Internship Project

Global Call Automation System Using Python and Twilio

Done By : Hariprasath S.

Overview of the Flow

- **Initialization:**
  - Start the Flask server and load the call queue (from a Google Sheet or CSV).
- **Call Queue:**
  - Process each call in sequence with statuses: Not Called, Connected, Disconnected, Forwarded, Accepted.
- **Call Execution:**
  - Use Twilio to make calls.
  - Follow scripts and monitor responses via keypress (1 for Accept, 2 for Forward).
- **Log Updates:**
  - Update call details (status, response, timestamp) in Google Sheets using the API.
- **Monitoring:**
  - Real-time dashboard to track queue status, call logs, and metrics (e.g., total, accepted, disconnected calls)
- **Repeat:**
  - Process calls until the queue is empty.

Technical Stack

- **Programming Language:**
  - Python (Core language for backend and logic)
- **API/Communication Service:**
  - Twilio API (For voice calls, SMS, and communication features)
  - OpenAI API (For AI-driven insights, message generation, or automation)
- **Development Environment**
  - Replit (Cloud-based IDE for coding, running, and deploying).
- **Frameworks/Libraries:**
  - Flask/Django (Optional, for creating a web interface or API endpoint)
  - Twilio Python SDK (For interacting with Twilio services)
  - Requests (For handling HTTP requests if needed)
  - Pandas (For data processing)

Technical Stack

- **Data Source:**
  - CSV / Google Sheets (For managing call queue or recipient list)
- **Monitoring and Logging:**
  - Twilio Console (For tracking call statuses)
  - Logging Library (Built-in Python logging for debugging and status tracking)
- **Authentication and Security:**
  - Twilio Credentials (Account SID and Auth Token for secure API access)
  - Environment Variables (Using libraries like python-dotenv to secure sensitive data)
- **Testing Tools:**
  - Postman (For testing Twilio API endpoints)

Flow chart

Flask server running

main program

crm or google sheet

must include phone no , caller details (connected , rejected , forward)

make call with some scripts

not connected (update data)

call terminated , rejected service , (update data)

connected (update data)

forward the call (update data)

Thank you