**Project Title:** Global Call Automation System Using Python and Twilio  
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**Project Overview**

The Global Call Automation System is designed to streamline and automate call handling using Python and Twilio. The system integrates real-time monitoring, automated call processing, and AI-driven insights to optimize communication workflows.

**Key Tasks Completed**

* **Flask Server Initialization:**
  + Configured and started the Flask server for handling calls.
  + Integrated Google Sheets/CSV to manage the call queue.
* **Call Queue Management:**
  + Processed calls sequentially with statuses: Not Called, Connected, Disconnected, Forwarded, Accepted.
  + Implemented logic for updating call statuses dynamically.
* **Call Execution:**
  + Utilized Twilio API for making calls.
  + Integrated predefined scripts for automated responses.
  + Monitored and logged user interactions via keypress.
* **Logging and Monitoring:**
  + Developed a real-time dashboard to track call progress.
  + Implemented a logging system to update call statuses in Google Sheets using APIs.

**Technical Stack**

* **Programming Language:** Python
* **API & Communication Services:** Twilio API, OpenAI API
* **Development Environment:** Replit
* **Frameworks/Libraries:** Flask/Django, Twilio Python SDK, Requests, Pandas
* **Data Source:** Google Sheets/CSV
* **Authentication & Security:** Twilio Credentials, Environment Variables (python-dotenv)
* **Testing Tools:** Postman

**Challenges & Solutions**

* **Challenge:** Ensuring secure API access and handling authentication securely.  
  **Solution:** Used environment variables and Python-dotenv for secure storage.
* **Challenge:** Managing real-time call updates efficiently.  
  **Solution:** Integrated Google Sheets API for dynamic status updates.

**Next Steps**

* Enhance AI-driven automation using OpenAI API.
* Implement advanced error handling for failed call attempts.
* Optimize system performance for higher scalability.

**Conclusion:**  
Today's progress focused on refining the call automation workflow, ensuring seamless execution, and strengthening monitoring mechanisms. Future enhancements will focus on optimizing efficiency and AI-driven automation.