



Automated Reporting System

Ariq Aqilah

Disclaimer

I am unable to provide the complete code and detailed data analysis due to the project being under a Non-Disclosure Agreement (NDA) with the respective company. The data used in this analysis contains sensitive company information, and therefore, cannot be published or shared to maintain confidentiality and the integrity of the company's data.

Problem

- The company faces inefficiencies in reporting new installations (ASB) to management.
- It relies on manual copy-pasting from Google Sheets to WhatsApp and Telegram.
- This process is time-consuming and prone to errors.
- There is no automated system to track Work Order (WO) and Put in Service (PS) data on an hourly basis.
- The lack of real-time tracking limits monitoring and affects overall operational efficiency.



Solution

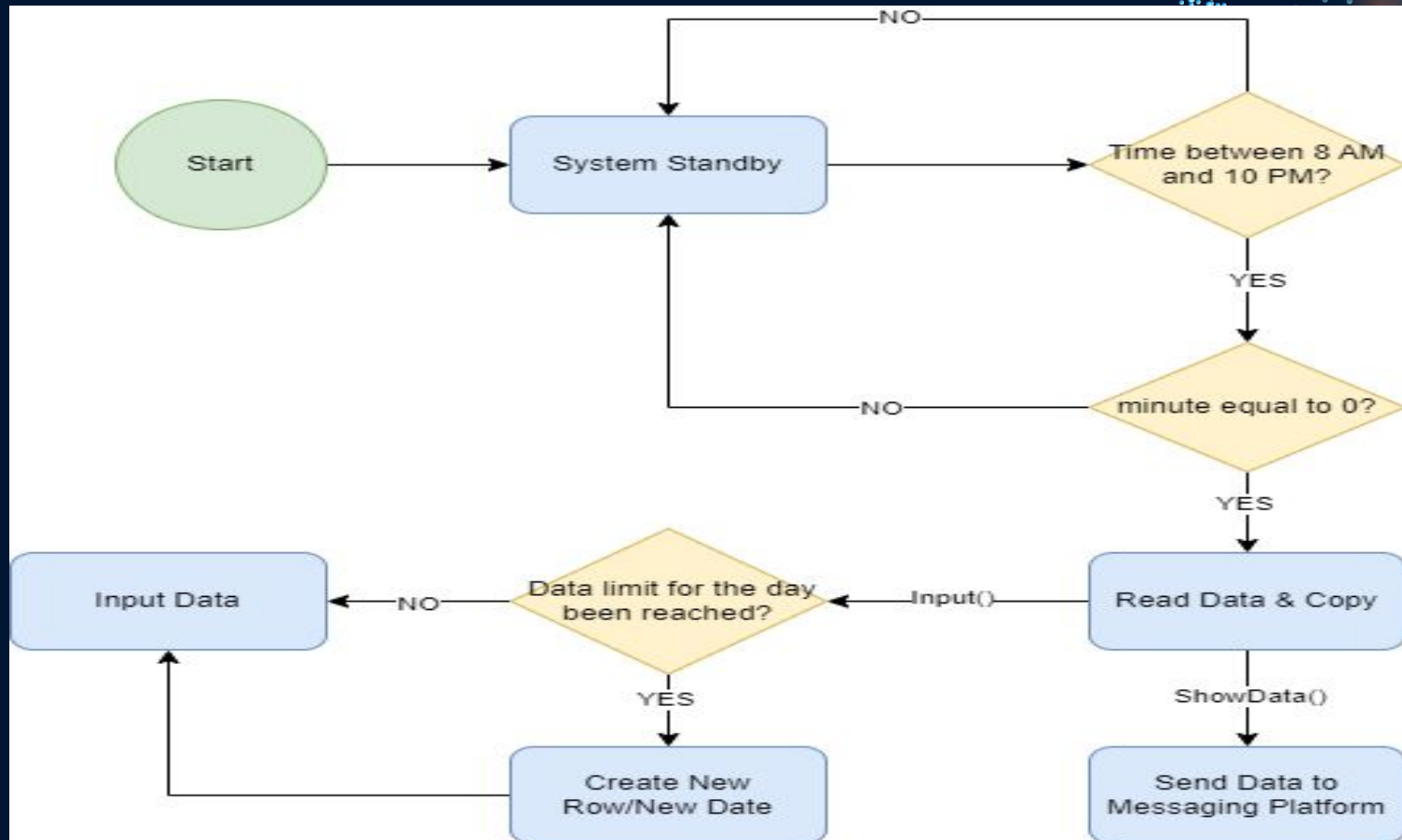
- Developed an automated reporting system using a Python-based bot.
- The bot automatically pulls data from Google Sheets and sends reports to WhatsApp and Telegram hourly.
- It tracks and records the total WO and PS data into Google Sheets every hour.
- The bot performs data analysis and predictions based on recorded data.
- The company receives actionable insights and recommendations from the analysis results.



Objective

- Real-time monitoring of daily KPIs
- Automate PS/WO provisioning
- Track KPI Assurance for Time To Repair (TTR)
- Automate periodic reporting

Bot Workflow



Bot Workflow

- Start: System enters standby mode.
- Time Check: Verifies if the current time is between 8 AM and 10 PM.
- Minute Check: Checks if it's the beginning of an hour.
- Read Data: Fetches and copies data.
- Send Data: Automatically sends data to WhatsApp or Telegram.
- Data Limit Check: Monitors if daily data limit is reached.
- New Row/Update: Creates new row or updates data if limit is reached.

