

Flow Chart for REC Pulse

The End-to-End Data and Notification Flow:

1. **Admin Action:** An administrator enters new data (e.g., an 'Absent' mark for a student) using the **Admin Model-Driven Power App**.
2. **Data Storage:** This new record is instantly saved as an item in the **SharePoint Online List**.
3. **Automated Trigger:** The "new item created" event in SharePoint automatically triggers a **Power Automate workflow**.
4. **Logic Execution:** The workflow reads the data, identifies the student and linked parent, and formats a notification message.
5. **Push to Azure:** Power Automate sends this formatted message to our **Azure Notification Hub**.
6. **Broadcast:** The Notification Hub efficiently pushes the notification to the specific parent's device that has the GuardianLink App installed.
7. **User Receives Notification:** The parent receives an instant alert on their phone

Detail View

Step 1: It all starts when an admin enters data, like an attendance mark, into the Admin App.

Step 2: That data is saved in our SharePoint database.

Step 3 & 4: This action immediately triggers a Power Automate workflow that formats a message.

Step 5: The workflow sends this message to our Azure Notification Hub.

Step 6 & 7: Finally, Azure instantly pushes this notification to the parent's mobile phone.

This entire flow is automated and happens in near real-time.

flow

Admin --> Admin Power App (Label: "1. Enters Data")

Admin Power App --> SharePoint List (Label: "2. Data Saved")

SharePoint List --> Power Automate Flow (Label: "3. Automated Trigger")

Power Automate Flow --> Azure Notification Hub (Label: "4. Push to Azure")

Azure Notification Hub --> Parent/Student App (Label: "5. Broadcast Notification")

Parent/Student App --> Parent/Student (Label: "6. User Receives Alert")

Demo code for mermaid

graph TD

subgraph "User Interfaces"

A[
Admin]

B[
Admin Power App]

end

subgraph "Backend & Logic (Power Platform)"

C[
SharePoint List]

D[
Power Automate Flow]

end

subgraph "Cloud Service (Azure) & End User"

E[
Azure Notification Hub]

F[
Parent/Student App]

G[
Parent/Student]

end

A -- "1. Enters Data" --> B

B -- "2. Data Saved" --> C

C -- "3. Automated Trigger" --> D

D -- "4. Push to Azure" --> E

E -- "5. Broadcast Notification" --> F

F -- "6. User Receives Alert" --> G

style A fill:#E6F3FF,stroke:#0078D4,stroke-width:2px

style B fill:#E6F3FF,stroke:#0078D4,stroke-width:2px

style C fill:#DFFFD8,stroke:#107C10,stroke-width:2px

style D fill:#DFFFD8,stroke:#107C10,stroke-width:2px

style E fill:#CDEBFF,stroke:#0078D4,stroke-width:2px

style F fill:#CDEBFF,stroke:#0078D4,stroke-width:2px

style G fill:#CDEBFF,stroke:#0078D4,stroke-width:2px