

ZIGGS: Sound detection in households

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PROJECT CONCEPT



SURVEILLANCE

Household surveillance for children, elderly and pets using LG devices



SMART DEVICE

Trained a CNN Model on detecting anomalies tailored for each house



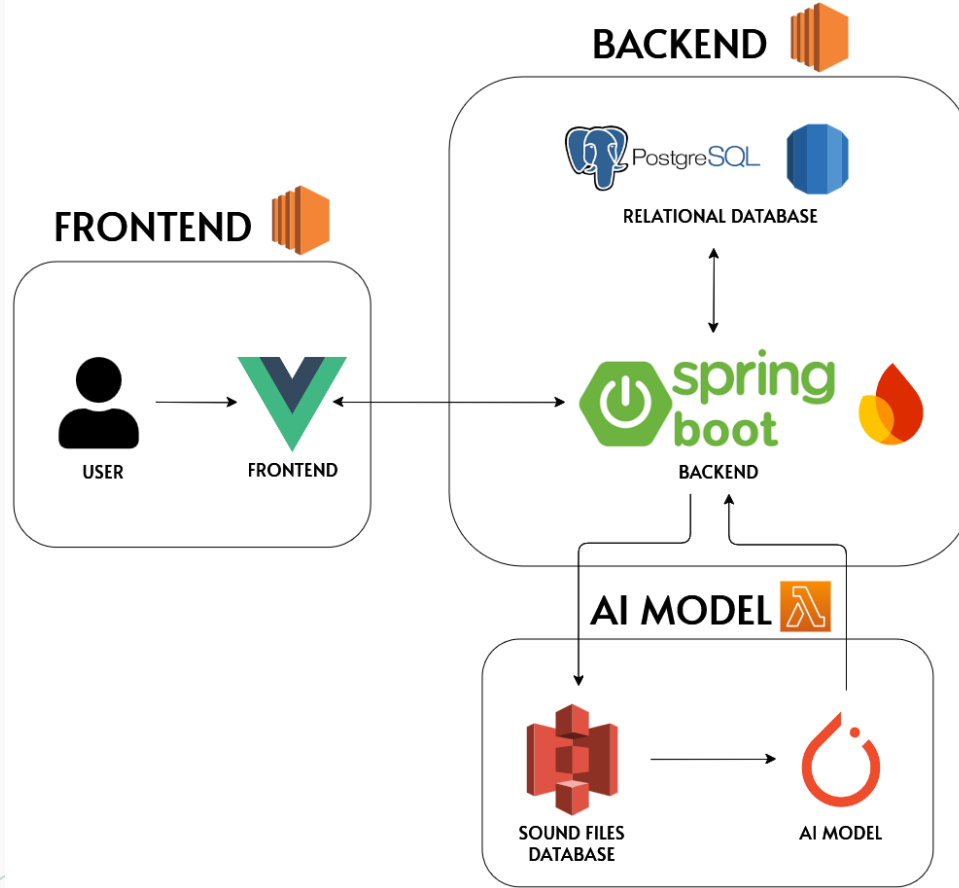
CONVENIENCE

Connects accounts to Household for alert management

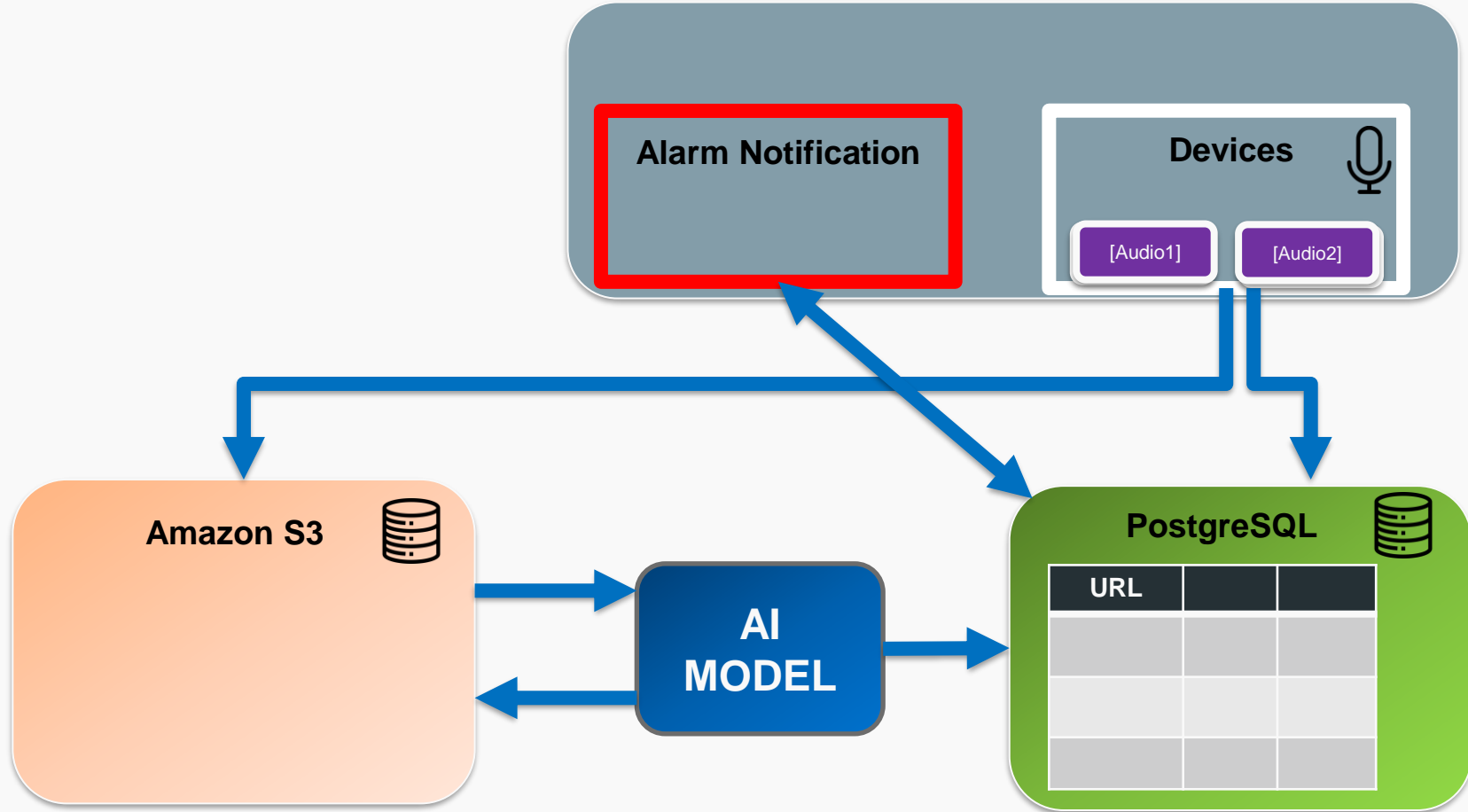
SHOWCASE VIDEO



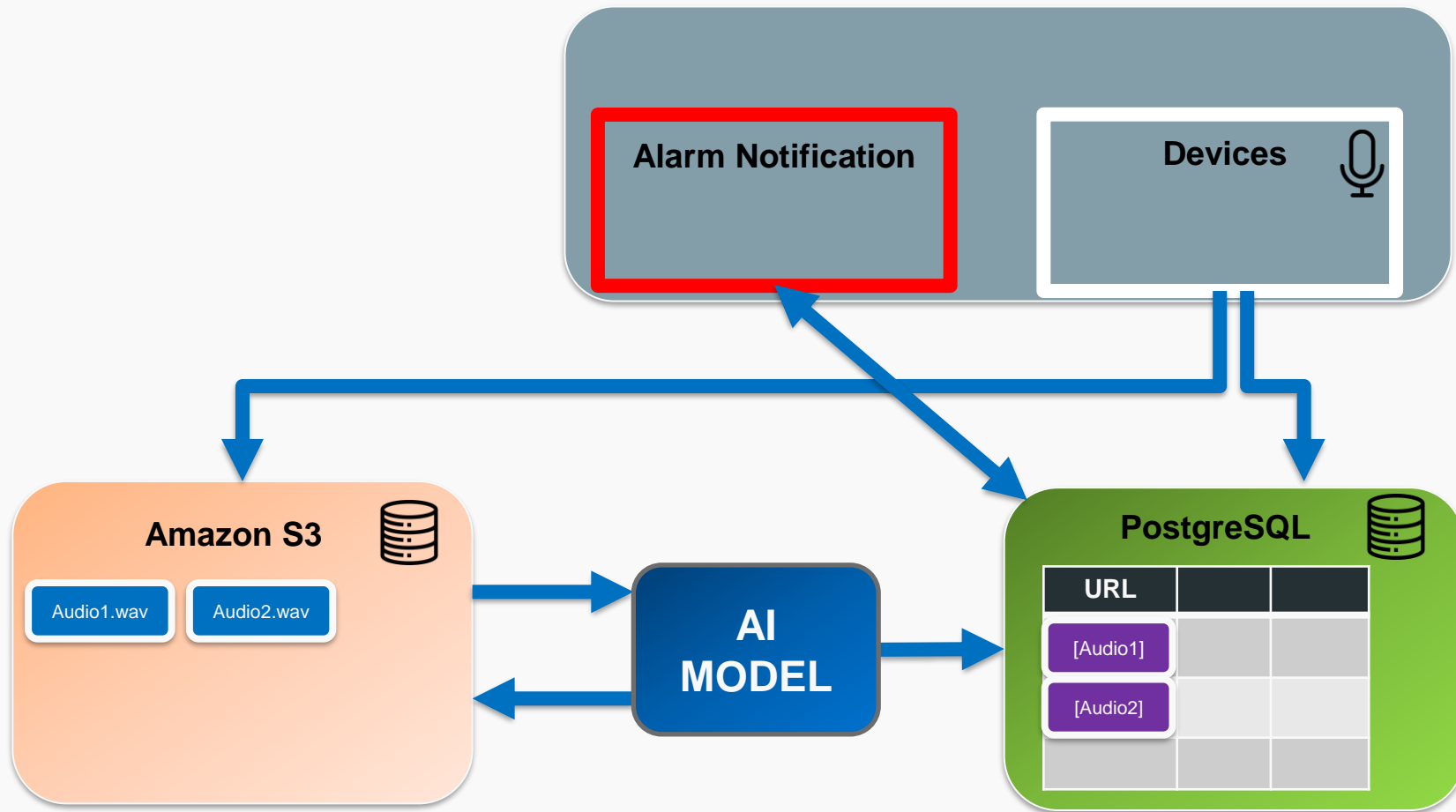
Software Architecture



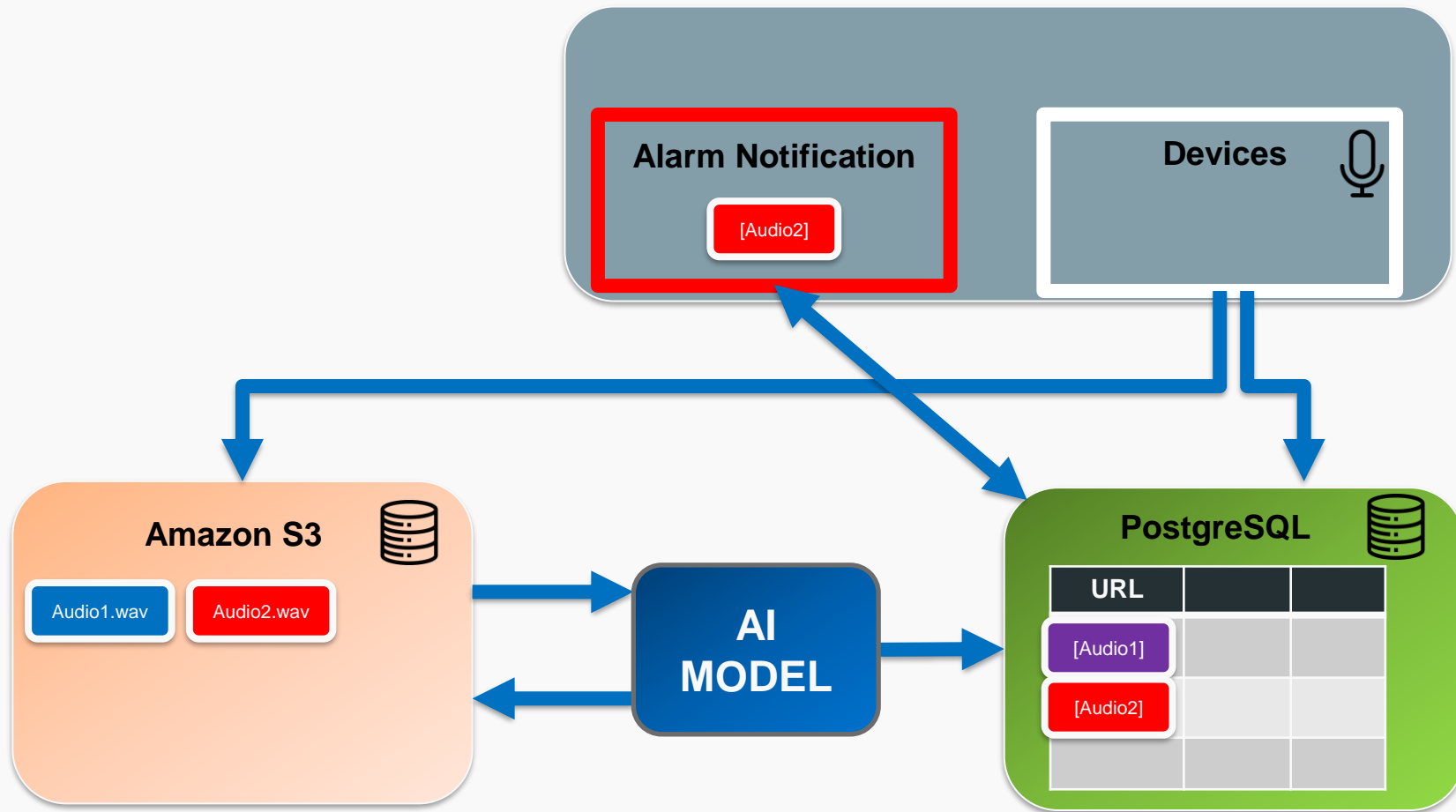
Data Flow



Data Flow

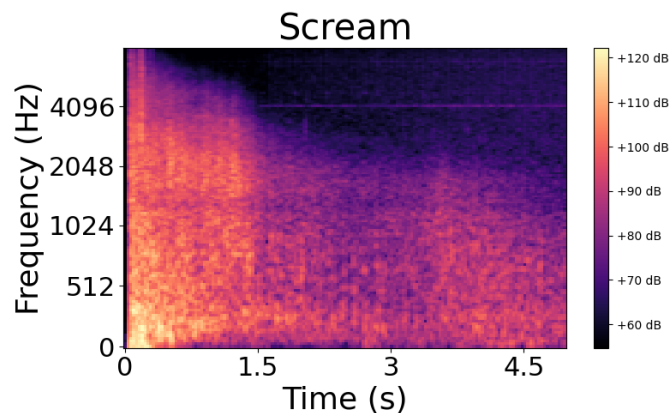
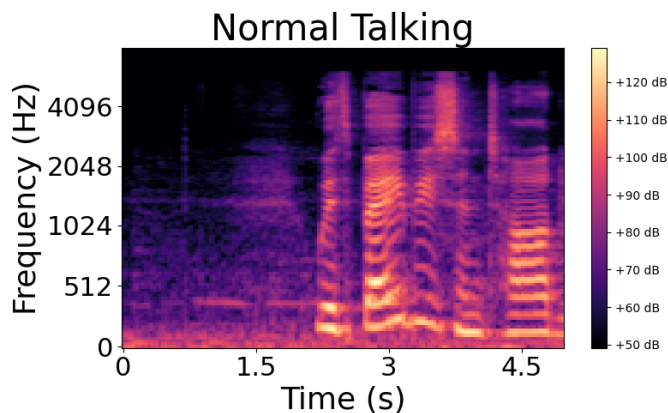


Data Flow



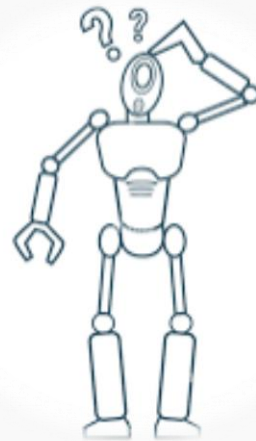
DATASET - FIVE SECONDS

Category	Type	Source	Duration	Number of Files
Household Noises, Conversations	Normal	ChildPlay Gaze, Extracted from Reddit	5 seconds	201
Accidents, Gun Shots, Screams, Glass Breaking	Anomaly	Extracted from Reddit	5 seconds	140



RETRAINABLE AI MODEL

The Model can effectively learn and train itself, so that the device is tailored to each household making each alert more precise over time





THANK YOU FOR LISTENING

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