

Cloud Controlled Smart Home Security System

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Group # 9

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Problem statement



Project Scope

- Facial and Vocal recognition.
- Sensors
- Modular system hardware
- Cloud service
 - Live video
 - Full cloud control

Existing Solutions

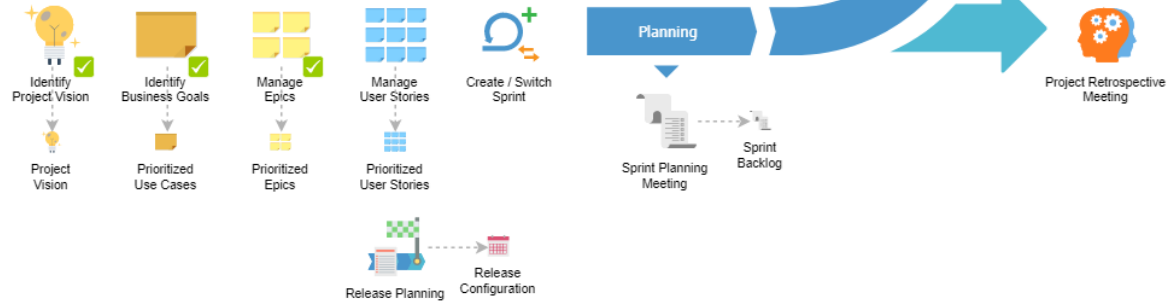
- ADT Home Security and vivint.SmartHome
 - Outdated Technology
 - VHS Tapes/ CDs
 - No Cloud Service
- Panasonic FacePro
 - Business technologie
 - No Cloud service

Key Benefits

- Modularity
- Fault Tolerance
 - No Single Point of Failure
- Data Driven
- Real-time
- Cloud Native

Development Methodology

- Small Sprints
- Requirements
 - Acceptance criteria



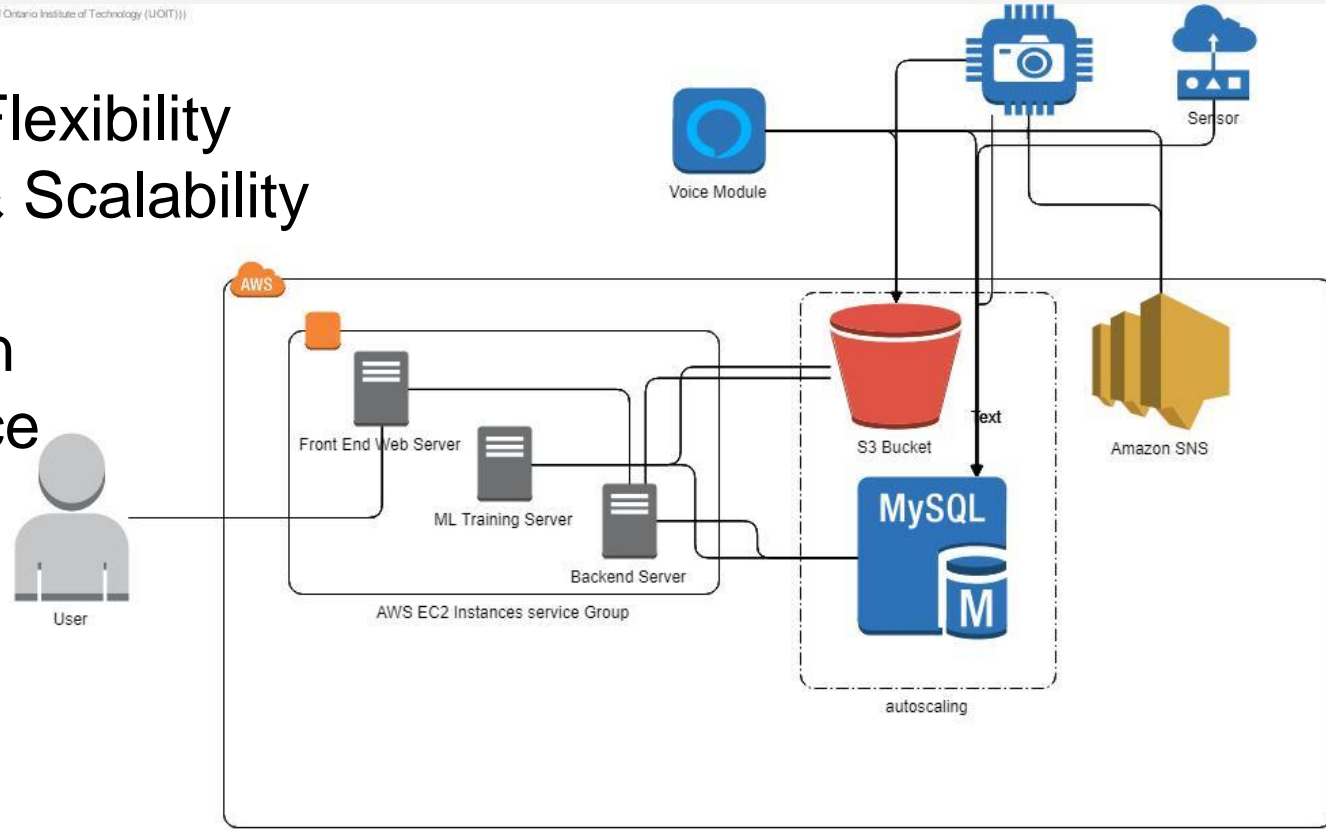
Solution Design

- Building blocks for smart home security
- Combined power of
 - Machine Learning
 - Cloud Computing
 - IoT
- Real-time Intrusion Detection System
 - Based on Person's Face and Voice
- Scalable across various disciplines
 - Airports, Labs, Secure Check In areas

Application Architecture

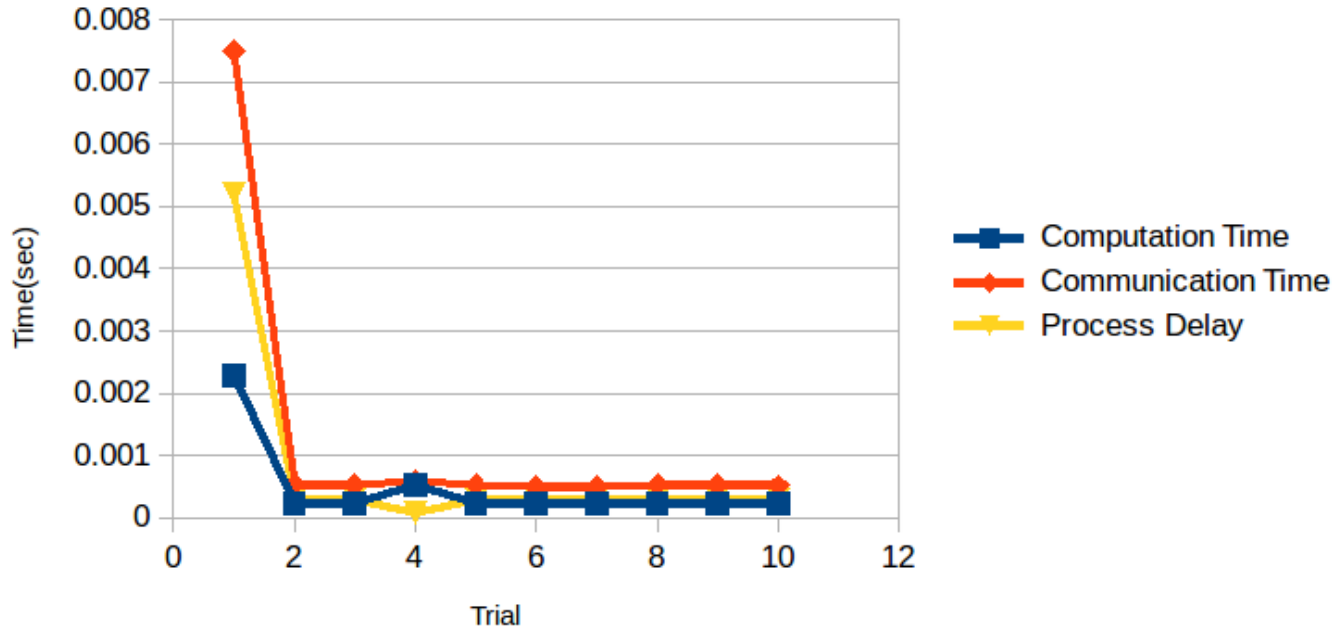
Visual Paradigm Enterprise(100935463)(University of Ontario Institute of Technology (UOIT))

- Modularity & Flexibility
- Consistency & Scalability
- Low Coupling
- High Cohesion
- Fault Tolerance



Testing

Real-Time Motion Detection in Cloud-Controlled Smart Home System



Testing

Delay Between Real time and Stream

You are watching on Device: fdg



Main Challenges and Solutions

- Streaming and Face Recognition
- Voice Recognition
- Video Codec formats for Cloud Website

Cost

Current month costs



\$38.63

↑ 88%
Over last month

Forecasted month end costs

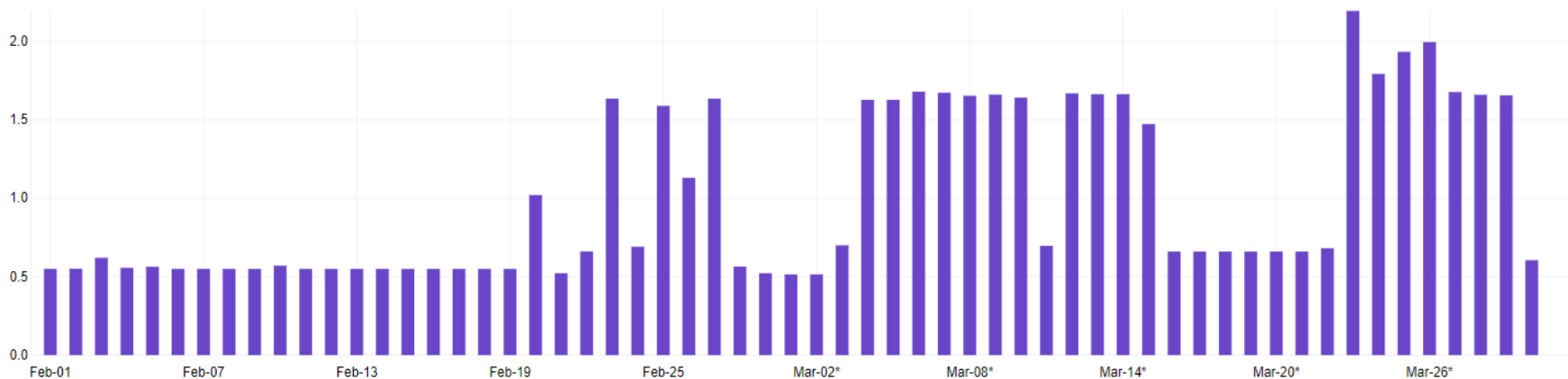


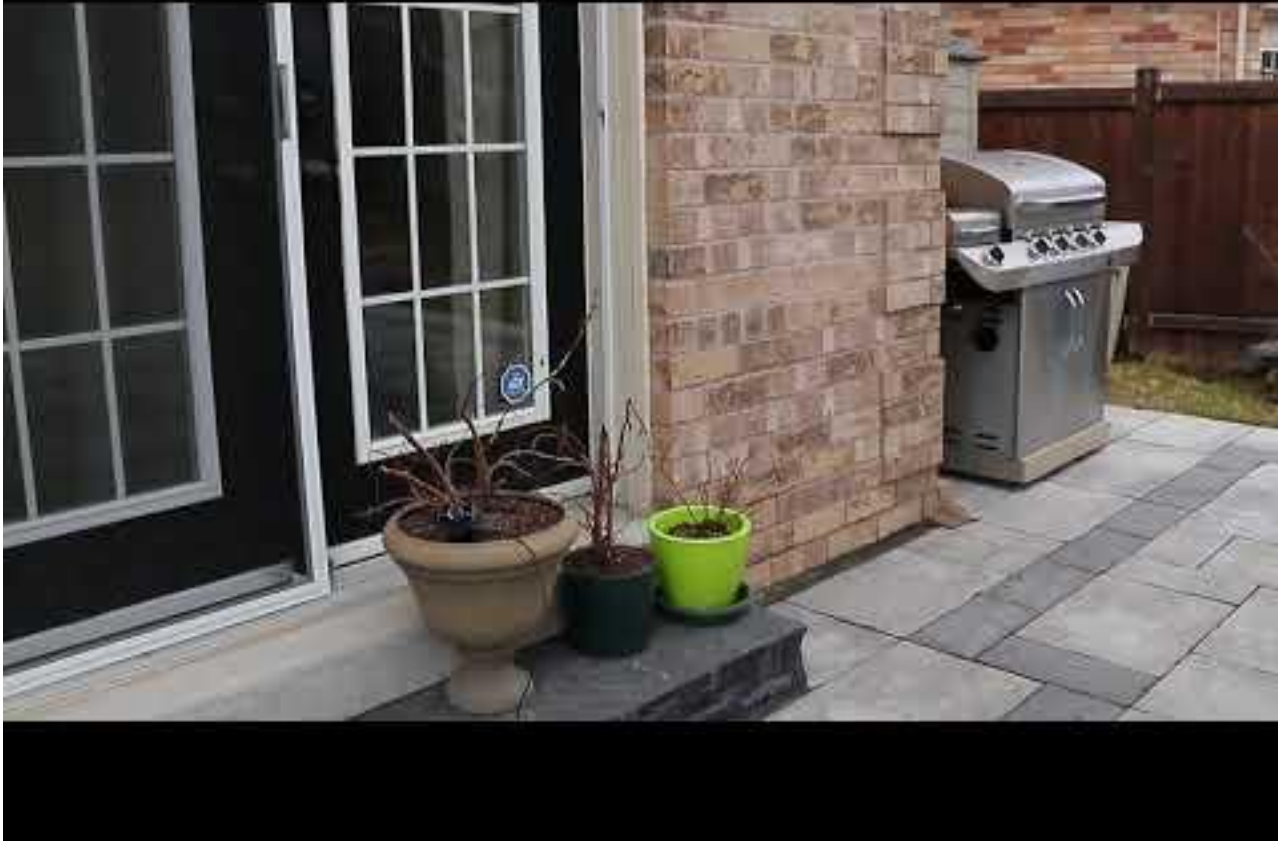
\$40.29

↑ 96%
Over last month

Daily unblended costs (\$) ⓘ

[Explore costs](#)





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DEMO