

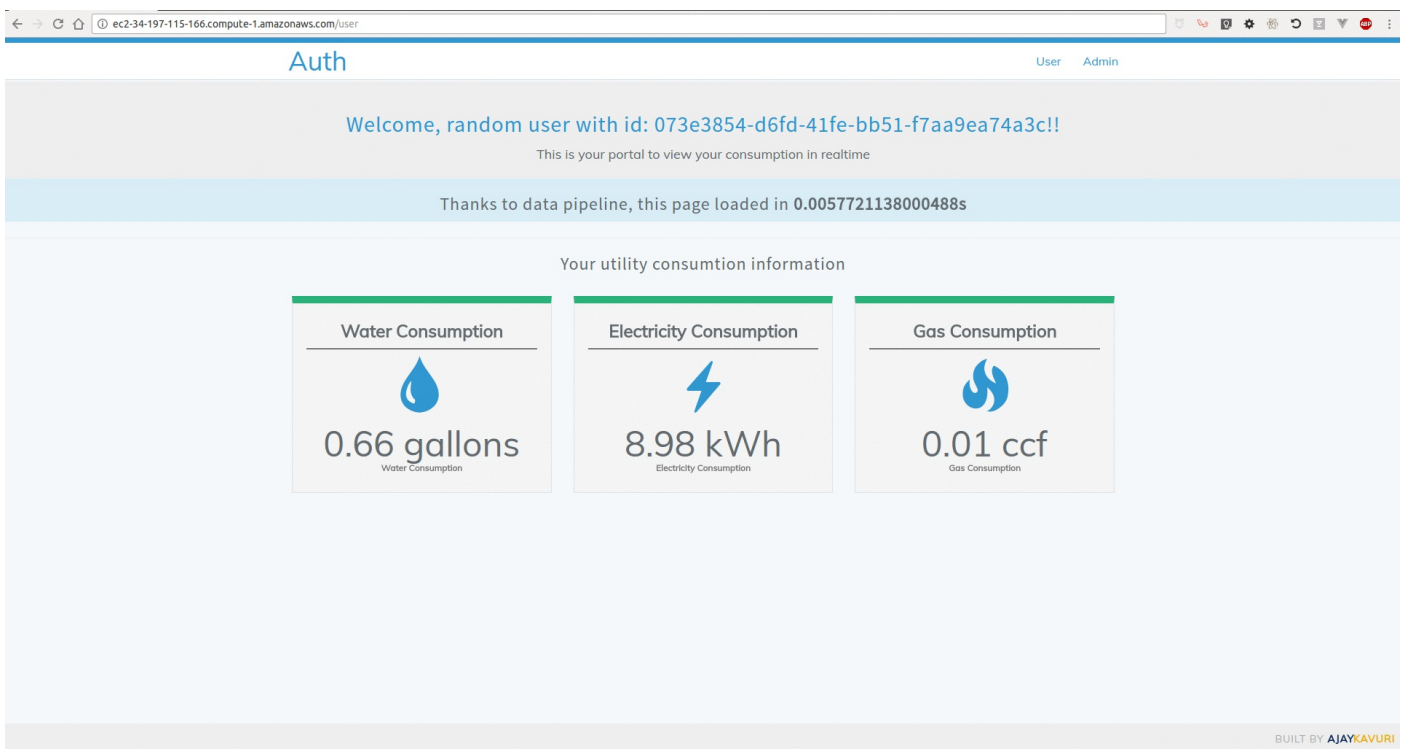


ANALYTICS OF UTILITY THINGS

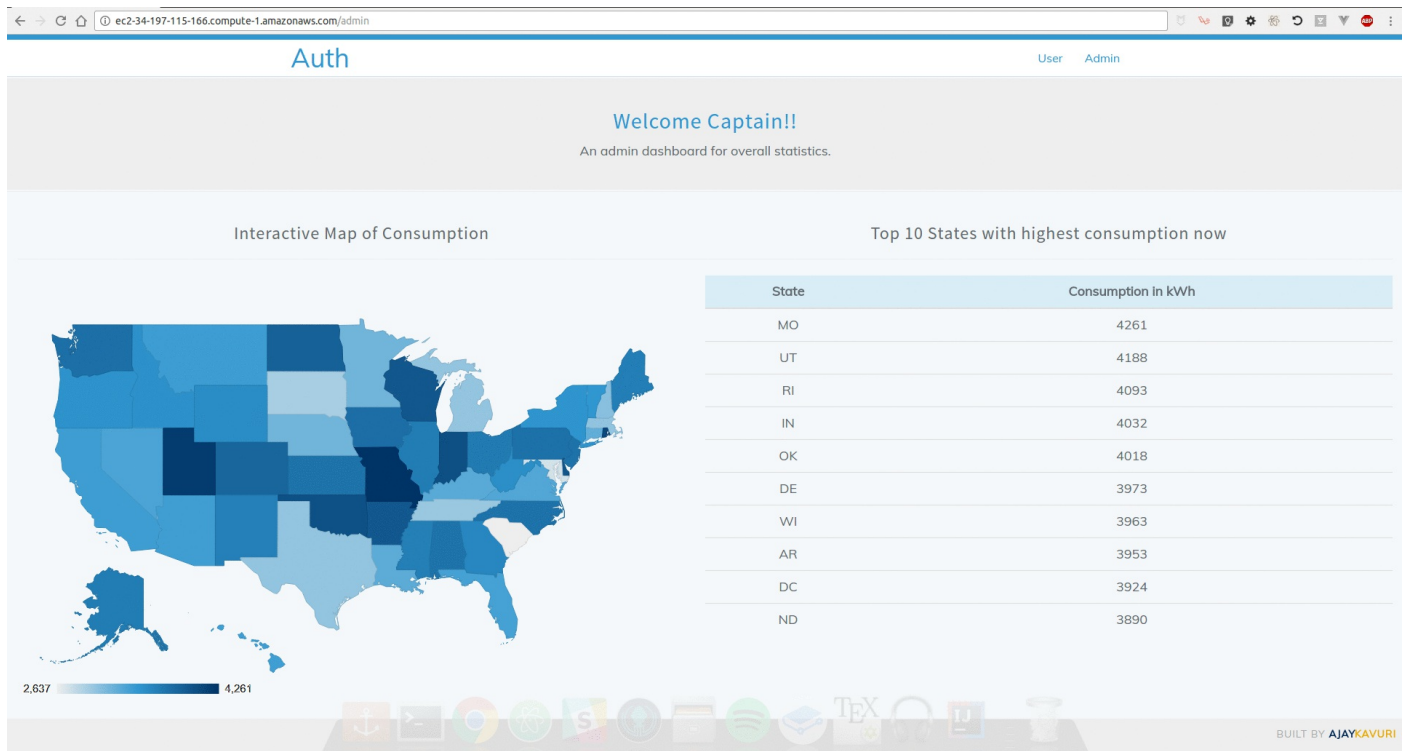
AUTH: Analytics of Utility Things is a platform for ingesting, processing and extracting insights from next billion connected Internet of Things (IoT).

Status: build passing	Presentation: slides	Demo: auth.pseudoaj.com	Contact: linkedin
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Wouldn't it be nice if you can see your home utilization like this?



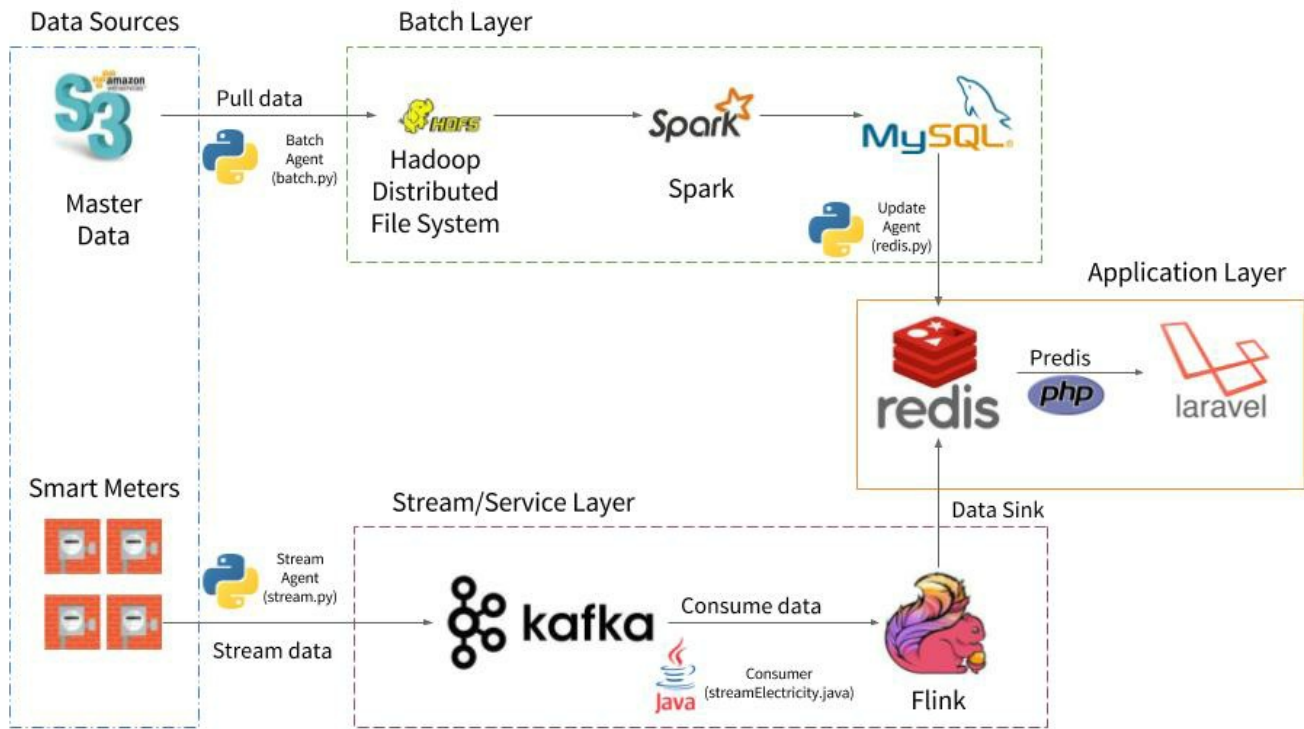
Or wouldn't it be cool to monitor your country utilization like this?



About

With the advent of Internet of Things (IoT), traditional systems are being replaced with smart systems that can speak with cloud in real-time but there is a engineering problem: How can I **ingest** this information with high **velocity** from **variety** of sensors and extract **accurate** insights at **scale** with **fault tolerance**? This project attempts to solve this problem.

Data Pipeline



Technical Stack

#	Technology	Language	Purpose
1	Apache Kafka	Python	Ingestion
2	Apache Flink	Java	Stream Processing
3	Redis	Java/PHP	Key/Value Cache
4	Amazon S3	N/A	Distributed Storage
5	Apache Spark	Python	Batch Processing
6	MySQL	SQL	Application Database
7	Laravel	PHP	Web Framework
8	Amazon AWS	BASH	Devops

1. Simulating Data

The idea is to create as realistic dataset as possible; hence the dataset is inspired from real world frameworks and smart meters.

2. Data Ingestion

3. Batch Processing

4. Stream Processing

5. Web Application
