



Introduction

The California Resource Corporation (CRC) has commissioned us to bring a solution to help them understand and manage complex flows of data through modern systems in real time. With countless services, APIs, and databases constantly communicating, spotting anomalies becomes a real challenge at which in some cases they are spotted after the damage is already done. With this project, we hope to build an interactive web application that helps CRC with this issue by visualizing data movement live, detect issues instantly, and take action before small problems turn into big issues.

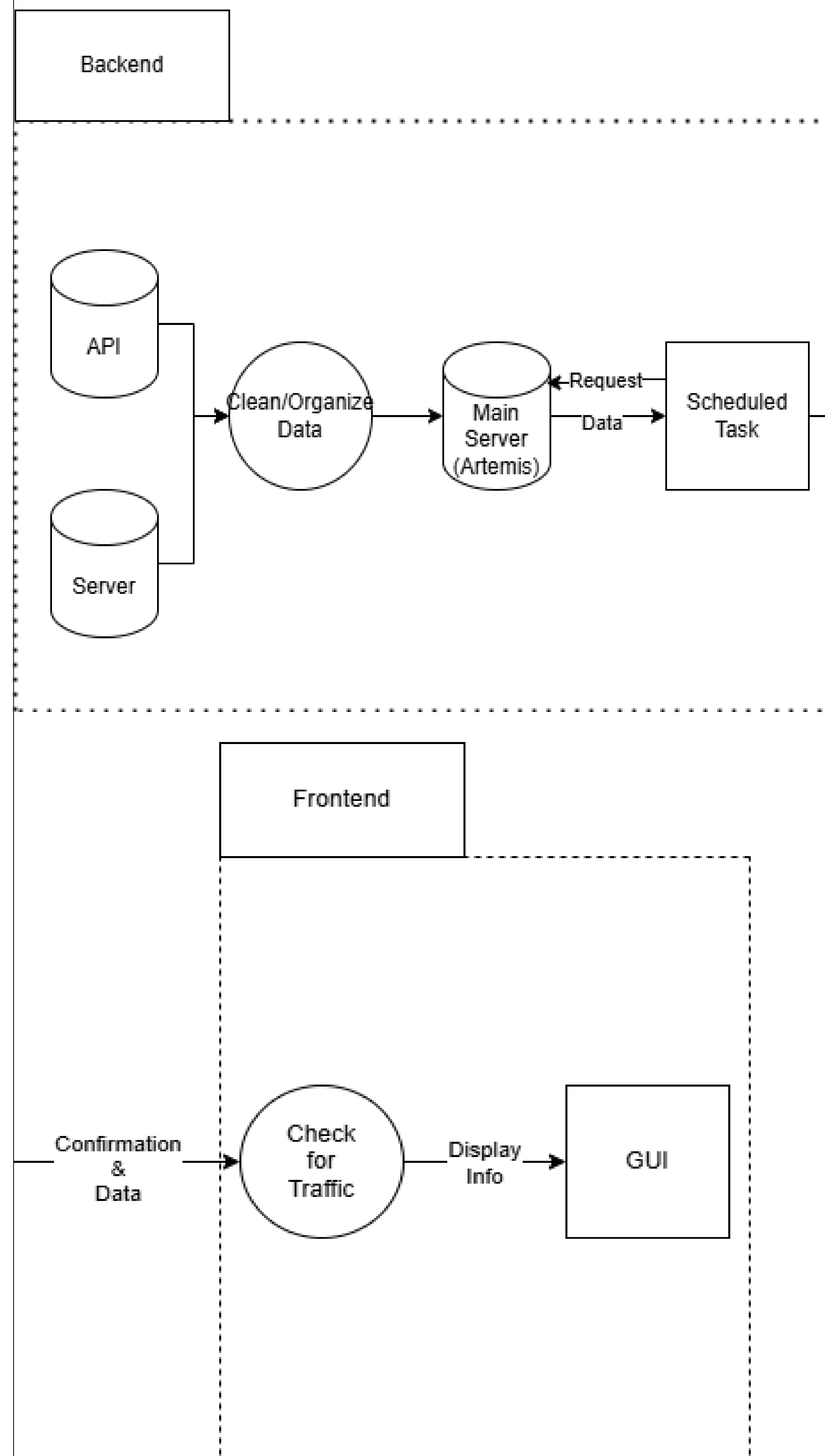
Features

- Live Anomaly Detection
- User-Friendly/Accessible GUI
- Secure Login
- Central Database for organized data

Resources



Dataflow



Description

Our web application aims to be simple, accessible, and provide real-time performance. We will be mainly using open-source technologies like Python with Flask, MariaDB, Chart.js, and others yet to be decided to create a clean, responsive, and secure experience. Whether you're a developer debugging a complex system or an analyst monitoring performance, we hope our tool will offer a quick insight with zero hassle. While our objective is to build a tool for CRC, this tool could help other in other industries like in finance and healthcare. Our vision is a future where understanding your complex system is as easy as watching it work.

Development Timeline

- **August/September:** Set up Central Database with mock data
- **October/November:** Set up GUI and begin setting up working demo
- **December:** Present demo to expo as well as submitting idea to CRC

