

CEVAC Administrative Console

- **Objective:** Transition scheduler data and backend scripts to CEVAC 3 database
- Improve accessibility to managing Alerts System by creating an administrative console



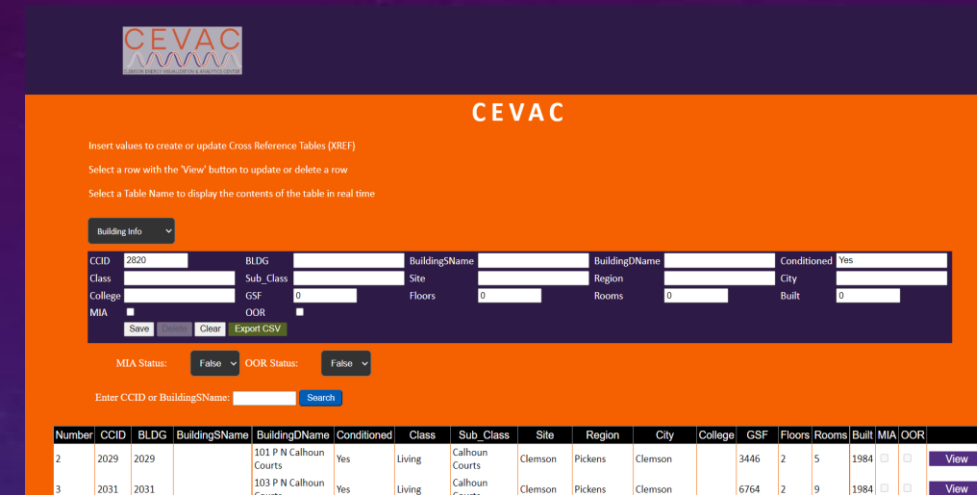
System Design

- Modular design and separation of concerns
- Improve capacity for transitions
- Easy to adjust behavior of Alert system from the XREF



Class Standing: Junior
Major : Computer Science
Minor: Cybersecurity

CEVAC WEB APPLICATION/SITE VIEW



Facilities' Data Displayed

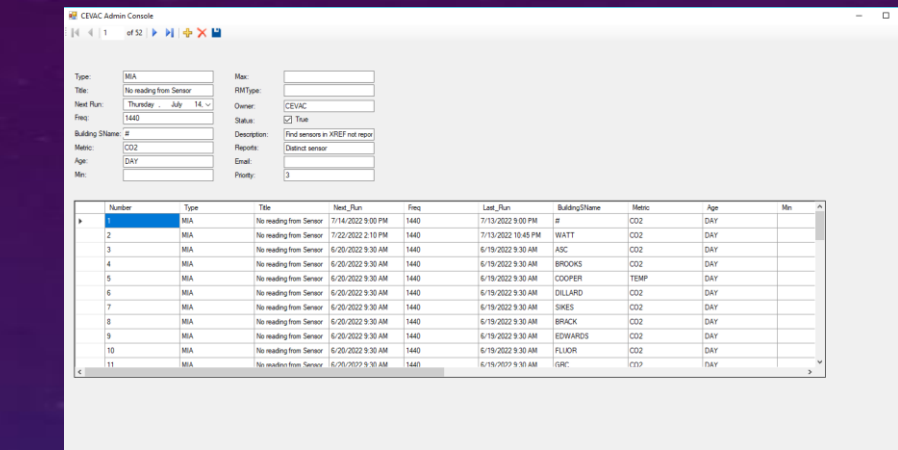
- Building Info
- Chilled Water
- CO2
- Energy
- Electricity
- Humidity
- Schieder Energy
- Schieder Power
- Steam
- Temperature
- WAP
- Water
- Scheduler Status

Features/Functionalities

- .NET Framework (Front-end), C# (Back-end), and ASP.NET Web Forms (Project Type)
- Updated UI and organization of web app
- Expanded Scheduler Status table to keep track of certain Alert Type with the associated building the problem/issue exists
- Streamlined alert data due to more tracking functionality to track alerts better
- Enhanced filtering capabilities with new CEVAC 3 architecture
- Provides basic application functionality (Create, Read, Update, and Delete) for database tables in CEVAC 3

Scheduler Status Design

- Automatic tests or cycle runs for meter readings are automated to cross reference buildings and match errors with the associated Alert Type and Building



Early Development:

- Developed windows desktop application using WinForms for rapid application development for testing features with a pre-existing GUI
- Provided CRUD functionalities, which helped accelerate development and understanding of requirements
- Application can be installed on other machines through a downloadable exe file

Future Work

- More Features in increasing functionality
- Displaying real-time data using scripts
- Update UI framework to .NET CORE
- Scalability to handle more tables for manipulation

Deployment:

- Linux Server hosts the App Server where all the back-end python scripts live
- Hosted on Windows Server within the CEVAC 3 Ecosystem
- Hosted on a Web Server using IIS Web Deploy to publish within the Clemson network domain

Transition Documentation

- Working with returning employees to hand off former projects
- Documentation and Meetings
- Projects: Scheduler and Web App