**Technical Review & Design document**

**Data Analysis & Cyber Security**

**Objective**: why you are building this system.

We are building this system because there is a power and water data collection station at the college, wanted to make an application that works with these data collections and use Artificial Intelligence to make predictions to water and power usage in correlation with the weather.

**Requirements**:

* + Functional Requirements – product features or functions
    - Use case diagram can capture functional requirements
  + Non-Functional Requirement
    - Quality constraints (e.g. performance, security portability, etc…)

As can be seen in figure 1 below, the user will log into the website, their login attempt will be validated by the system to make sure that they’re a valid user. They will then be taken to the Dashboard, from which they can choose to go to the Predict Page or the Graphs Page. The three main pages in the website will be accessible at all times through the use of a navbar. If the user decides to go to the Predict page, they will be met with some fields to enter information. Once the user enters the required details, a prediction will be made and displayed to the user.

Diagram

Description automatically generated

Figure 1: Use Case Diagram

**Architectural Design** – explain with the aid of diagram(s)

**3 Tier Architecture**

MVC (Model – View – Controller) Architecture

**User Interface** –

Wireframes of your frontend (can use Figma to create your diagrams).

**Technical Review**

Describing each of the technologies that you will use and any alternative that you have researched.

**Data Storage – Model ERD**

A design of your database schema (ERD), Mapping of the ERD to a set of relations (tables).





