

**Eon**

**Temperature Control System - Den  
Written Requirements**

## Revision History

<b>Authors</b>	<b>Description of Change</b>	<b>Sections</b>	<b>Rev</b>	<b>Date</b>
Erine Estrella Mohamed Jaafar Devontae Reid Sean Wulwick	➤ Initial Release	All	O	2-28-18

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# 1 Team Description

Team Member Name	Email Address
Erine Estrella	erine.double@gmail.com
Mohamed Jaafar	mohamedjaafar95@csu.fullerton.edu
Devontae Reid	devontae.reid@gmail.com
Sean Wulwick	sean.wulwick@csu.fullerton.edu

## 2 Terminology

The following table defined terms used within this document.

<define key terms used in your document that would not be commonly understood. Any terminology that is key to your system should be defined here. Any term you invented or that have special meaning within the context of your system should be defined here. Remove this blurb before completing document.>

Term	Definition
HVAC	HVAC stands for heating, ventilation, and air conditioning. This technology provides thermal comfort and acceptable indoor air quality.
Weather Channel API	An API is an application programming interface, which allows the temperature control system obtain desired data from the weather channel.
Threshold	A certain temperature range that the system will be able to maintain.

## 3 Temperature Control System

A heating/cooling control system that is capable of taking user input (temperature in either Fahrenheit or Celsius) in and activating a HVAC system. This system also allows for scheduling and a external temperature display based on location information that is collected from the Weather Channel API. The control system is also capable of maintaining a climate type within a room at a predefined threshold of temperature. For example, if the user would like a warm climate, a temperature of 80 degrees F can be maintained constantly.

## 3.1 Overview

1. Connection to Wifi
2. Display of Weather Channel API
3. Custom temperature input
4. Maintain temperature threshold
5. User defined temperature threshold
6. User defined temperature scheduler
7. Setting temperature based on user defined city
8. Enable / disable system
9. Vacation Mode
10. Error Override

### **Guidelines** – remove these from your document

Write at least ten to twenty text requirements that describe the key features of your system. This description should encompass all important functionality of your system. A person reading the document should be able to understand what the system does without any external references. Assume the audience for this document has the typical knowledge of a software engineer. Do not reference any implementation details. Describe what the system does, not how it does it.

Use grammatically correct and concise language.

Use a uniform level of detail.

Once defined, terminology such as “the user” and “the system” are generally appropriate.

Reuse of material from use-case and class diagram is OK, but make sure it is all shaped into the proper form.

The word “shall” indicates a testable requirement. Bold this word.

Use indentation to clarify the structure of the documents.  
Do not write “shall not” requirements. They are problematic to test.

#### AND Requirements

XYZ action shall be taken when **all of** the following conditions are met:

- .
- .
- .

#### OR Requirements

XYZ action shall be taken when **any of** the following conditions are met:

- .
- .
- .

**Your system will be tested according to these requirements.**