

Senior Project

By Evan Hack

Student Name: Evan Hack **Degree and Major:** Cyber Security Bachelors Degree **Project Advisor:** Songhui Yue **Expected Graduation Date:** Spring of 2025 **Problem Statement:** Everybody wakes up in the morning and dresses appropriately for the weather, but sometimes the weather can be unpredictable or chaotic to the point where it is hard to decide on what you should wear. To keep up with this challenging obstacle many people refer to weather apps, websites, or even weather channels to keep up with the weather. However; there are many different channels that relay information on the weather and most of the time the readings for the temperature or weather is not always the same. This can be a problem for many that are trying to have comfortable days where they do not sweat or struggle to stay warm. It is important to understand the weather or at the very least have a better representation of how the weather will be for the rest of the day. This matters because not knowing the weather could lead to sickness and terrible uncomfortability. You can become sick based off the constant change in temperature your body is exposed to, for example if it was warm outside on Monday and then incredibly cold the next day and you did not know you could get sick from the instant change in temperature. The reason as to why you could be incredibly uncomfortable by not knowing the weather is that if you are wearing a heavy jacket or hoodie during a hot day then you will sweat a large amount. This could cause you to feel incredibly uncomfortable. This could happen if one day its slightly warm and windy then the next day its hot. However; I propose a solution to this problem. I am going to create a website that will more accurately display the weather. The benefits of my solution is that not only will it be able to show a better representation of the weather. We are all at the mercy of the weather and the weather is becoming harder to predict in todays world. So I want to create something that will allow us all to have a better estimation of the weather.

Project Description: I will be making a weather website that will show the weather of the users location and weather of nearby locations. Users will also be able to look up other locations to find out the weather. **Proposed Implementation Language(s):** Javascript,HTML **Libraries, Packages, Development Kits, etc. To be used in the proper implementation language(s):** Visual Studio Code **Additional Software/Equipment Needed:** Laptop **Personal Motivation:** The reason I chose to do a weather website is because every morning I look at my phone for the weather so I can decide on what to wear for the day and sometimes it feel like it is not the most accurate. So I want to create a weather website that will be accurate to the actual weather. **Outline of Future Research Efforts:** There will be an early prototype duing the middle of the semester of Fall 2024 and a finished product by the end of the Fall 2024 semester. **Schedule:** **Summer (April 30th - August 1st):** I will create the ground work or foundation of my project before the start of the Fall 2024 semester. **August 1st - October 16th:** I will have the first prototype completed. **October 17th - Due Date:** The project will be complete.