## Competitive Analysis

* Since I have a niche topic like building an climate application for airborne soldiers in the army I have decided to go with a more social media approach with the main focus being on providing live weather data to commanders, jumpmasters and people that will be using the drop zone. Not just anyone will be able to use it however, due to operational security and the risk of civilians interfering with the drop zone and practice missions only DOD personnel will be able to access it. Now theirs probably not much profit for this application since it will not be using ads to maintain it and the company, but for instructional purposes lets say I’m a private contractor working with the government to create this application and hopefully it will be a invaluable tool for them.

#### Somewhat Similar Sites:

* + <https://aviationweather.gov/>
  + <https://www.airweaassn.org/Library/afwa/Air%20Force%20Weather%20Agency.htm>
  + <https://openweathermap.org/>

### Investigate Websites:

#### **Aviation Weather Center (AWC)**

**Design:** Straightforward layout that has that modern look with cool symbols that highlights readability and easy access to information. Doesn’t have the most appealing features or visually appealing, but it focuses on data presentation and accessibility.

**Functionality**: Site offers a wide range of aviation weather information, including forecasts, observations, and various weather maps. It provides specialized tools for the aviation industry, such as Ceiling & Visibility, Turbulence, and Icing forecasts

**User Interaction:** It's super easy to find your way around the website. They have a simple menu that takes you straight to what you need without any hassle. Plus, there's a "dark mode" that makes it easier on your eyes, especially if you're checking weather late at night or early in the morning.

**URL Changes:** None

**Technical Inspection:** Upon inspecting the webpage I noticed the use of a stylesheet named bootstrap-nightshade.css and the bootstrap.bundle.min.js script which means it pulled this from bootstrap

**Summary:** The design of this aviation weather app is pretty straightforward and utilitarian, meaning it's all about giving you the aviation weather info you need. They've got some cool features, like visibility forecasts and interactive maps, which are super helpful if you want to check the weather quickly and easily. Even though it might not have all the flashy graphics, it's designed to be practical.

#### ***Air Force Weather Agency***

**Design & Functionality**: This site is all about getting important weather info to the Air Force so they can plan their missions safely. It's set up to be super straightforward and quick to use, focusing on giving out weather forecasts, alerts, and checking the global weather for any operation plans.

**How It Works for Users**: The website is made to be efficient and secure, especially since it's for military folks. They've got strong security to protect the information and make sure everything is up-to-date in real-time.

**URL Changes:** There are numerous %’s throughout the URL.

**Technical Inspection:** Doesn’t seem to be any use of bootstrap, indicating their may be some originality with the design of the page

**Summary:** Designed with a more traditional layout, which could indicate an older design from like the 90’s. It focuses on providing a hub of information and resources relevant to the agency's mission. The use of simple navigation elements and the clear different sections ensure that users can find information with ease, although it may lack modern interactivity and visual appeal.

#### **OpenWeatherMap**

**Design**: Compared to military sites, OpenWeatherMap is more modern and easy to get around. It looks nice and makes finding different weather services a breeze.

**Functionality**: It offers current weather, future forecasts, past weather data, and even maps. They even have an API

**User Interaction:** They show you how to use their weather tools with lots of examples and let you try things out right there on their site.

**URL Components**: OpenWeatherMap uses "?" in its links to help fetch the weather details you ask for. The "#" is used in their guides to quickly take you to the part you're most interested in.

**Technical Inspection:** The inspect element brings up the link to bootstrap.min.css, indicates that the site likely utilizes Bootstrap's pre-designed components for UI elements.

**Summary:** This website has a modern design that's all about the user. It has interactive features like a search bar that changes as you type and information cards that look nice.

The site has a lot of useful weather services, and they explain things in a way that's not too complicated.

## GitHub Repository Research

1. [**Ishneha09’s Weather Project**](https://github.com/Ishneha09/Weather-application)
   1. The GitHub repository is for a cool weather app that tells you the weather for any city you want to know about. It uses basic web stuff like HTML, CSS, and JavaScript to make everything work. It's set up to get the latest weather info from the OpenWeatherMap API, which means you get the most recent info on stuff like how hot or cold it is, if it's humid, and how fast the wind is blowing. The instructions in the README are super easy to follow - it tells you how to set up the app and start using it right away.
2. [**Yashashetty502 Weather Project**](https://github.com/YashaShetty502/Weather-Project)
   1. A basic weather forecasting website. The code is written in HTML and JavaScript, suggesting a lightweight and potentially quick-loading application, which might be especially useful for operational planning when time is a critical factor. This repository could offer insights into creating a simple yet effective user interface for weather forecasting.