[Company name]  [Company address]

Project brief/Brainstorm

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# Project Goals

## Values

Provide web technology solutions to bring a rich and authentic user experience for a client.

## Mission

The mission for the website is to use 3d web technology to display interactive and 3d content that interoperates data/information presented from a weather API.

The purpose of using interactive 3d content is to provide a different perspective on weather data from a specified location.

The primary purpose of the website is to show my web development/software skills. Therefore, it isn’t vital to have a fully finished product. But there should be a minimal amount of work to achieve so I can show my learning and process to work independently on a project.

The basic work/project to have displayed for the end of the semester is interactive 3d models and animations using a JavaScript framework/library that makes information about the weather easier to understand. Therefore, basic 3d models and animations that are displayed in accordance with the information from the weather API should be the standard for my minimum level of achievement.

# Project Overview

## New website / Redesign?

This is a new website that has never been created before.

## Expected deliverables/functionalities

Interactive website with 3d models.

Intuitive design

Pull data from a weather API

3d Models interpret the weather content in a user friendly way.

# Target Audience

1. Farmers
2. Locals interested in the weather for the day/week
3. Public
4. People who want a perspective of the regions weather in an interactive way

**Age:**  7+

**Gender:** Male, Female

**Values:** Want to know the weather

# Competitors/Examples

# User story

John is a keen mountain biker and needs to check the weather before he rides. He wishes that he was able to interpret the information from the weather apps in a way that he can understand.

Luckily John came across a cool web app that displays 3d renders and models that give a richer and deeper perspective on the data about the weather. He is able to understand what it is meant by 0.5mm of rainfall based on the 3d renders and models that give perspective of rain size to how much water is collected in a bucket.

There are other cool 3d renders and features that give John more meaning from the data of his regions weather.

# Features of the site

The website will need to display the information of the weather in an exciting and relatable way to bring a deeper understanding and perspective on the regions weather.

The app will need to display data about…

**Regions Name**

**Temperature**

**Humidity**

**Wind – Gust, Speed, Degrees**

**Rainfall**

**Description of weather such as broken clouds – like what does that even mean lol**

# How to interpret the information with Three.js

Three.js and React.js are both great tools to use for the purpose of the project. I will also use React Three Fiber.

## Description

The weather description is vague and doesn’t give any imagery to have an idea. Therefore, a solution may be to create a 3d model and animation(possibly) that gives a greater visual cue of the what the weather looks like currently.

For example, if the weather currently says “Scattered clouds” then there will be a 3d model displaying this kind of weather. It doesn’t give any more data to the user but gives a subtle visual cue to the user which stops them from imaging what the descriptions is trying to depict.

## Rainfall

The information about the rainfall can be confusing and doesn’t give any relevance or perspective for the user. Therefore, it will be great to have a model of how full a bucket will look like depending on the rainfall data pulled from the API.

The bucket will be interactive and give some accurate relevance and perspective of how much rain is expected.

## Wind

The information about the wind speeds and gust

# List of Components

## Components in Website

* App Component
* Wind Component
* Rainfall Component
* Header Component
* Menu Component
* Weather Component – API
* Cloud Overhead component

## App Component

The App Component is holding all the components that are to be displayed on the website. The application will be a single page application so there is no need for React-Router, and other packages.

## Header Component

The Header Component will be the first component that the user sees. The Header component will contain

* Div element of className=”header-container”
  + Background-image
* Div element of className=”weather-container”
  + H1 {weather.main.cityname}
  + H2 Temperature {weather.main.Temp}
  + H2 Rainfall {weather.main.rainfall}
  + H2 {weather.main.description}

## Menu Component

The Menu Component will contain the navigation for the site. It will include links to the different components on the website.

# Component Hierarchy

The Component Hierarchy will describe the different components and how they are related and nested together.

App

* Menu Component
* About Component
* Header Component
* Wind Component
* Rainfall Component
* Clouds Component
* Footer

# Wireframes/mock-ups



