Snow Much Fun Project Proposal

CSCI 3308 Software Development Tools and Methods

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Description

Our project will be an interactive website that displays a map of Colorado overlaid with current weather conditions. This website will allow users to view regions of Colorado and view current weather, weather forecasts, and condition reports. The map will also include links to things to do in the region such as ski resorts, national and state parks, and other regions of interest.

Users can also update the website with trip and weather reports that they experience in a given region and can submit activities or regions of interest to be added to the map. From this product users will have a comprehensive map of Colorado outlining the activities available and weather conditions which will make trip planning simple and easy.

Vision Statement

To provide easily accessible trip and weather information to anyone exploring Colorado.

Motivation

Colorado is known for its outdoorsy residents. This website will allow people to easily see weather conditions all over the state so that they can plan their trips accordingly. It will also allow users to share information about the weather all over the state such as road conditions and snowpack in areas of interest, information that is not readily available on other weather websites. This product will also make it simple to see what activities are available all over the state making trip planning easy and based on region.

Risks

1.) One of the largests risks for this project is our group's inexperience with the languages used for the architecture of this product as learning those languages is part of this class.
2.) Another known risk is the accessibility of the weather data we wish to use in our website. Since we are just pulling this data from other sites we are reliant on them that their data is publicly available and that it is updated for us to provide to our users.
3.) Creating a visual representation for a map of colorado may prove to be challenging and time consuming with our limited knowledge of creating interactive visuals.

Risk Mitigation Plan

1.) Our first risk will be mitigated by our involvement in the class. Because we are all enrolled in this class, we will learn the languages necessary for the architecture of this

project. Furthermore, because we are using languages that are common in the industry there will be many resources available to us.

2.) Government websites (i.e. NOAA) have publicly available weather data that can be used by our site even if public weather sites do not have a public databases so we will at least have some data for our site with good latency.

3.) Part of the class will go over pulling map data from other websites and should help us with the visual aspects of the website.

Version Control

We have created a Github repository for all code required for this project allowing us to version control our product and allowing us all to edit it simultaneously.

Development Method

We will be using the agile development method focusing on each end of our product simultaneously, allowing us to make changes to our product throughout the semester. We will use elements of Scrum to collaborate and address issues as a team. We will use sprints and retrospectives to complete and reflect on tasks during the different phases of our product creation.

Collaboration Tool

We have a created a Slack channel for communication regarding the project. We also have created a group Google Drive folder to allow us to all work on important documents together.

Proposed Architecture

A front end of the website will be built with HTML / CSS while our back end for databases and data retrieval will be built with SQL with server scripting in PHP. We will use this architecture as it is commonly used for web development and are subjects covered in the course.