COM S 319

Construction of User Interfaces

Midterm Proposal for Team 47

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Introduction

Our plan for the midterm project is a web application that displays the temperature and humidity of a room. We will utilize a Raspberry Pi and a DHT11 to collect the data, and we will use HTML, CSS, and JavaScript to create the web application. We have had a previous interest in Raspberry Pis and we thought this would be a great opportunity to learn more about it while learning what this course is originally about: the construction of user interfaces. Creating a website using the data collected directly by us feels more rewarding than using data from outside sources. And beyond that, learning to work with a platform such as the Raspberry Pi will give us knowledge we can iterate upon to make more interesting technology in the future. We are hopeful for this project and feel that it will be a great learning experience.

Objectives

The following are objectives that we wish to accomplish for this midterm project:

1. Learn to effectively work together using tools like GitHub to share work and collaborate.

2. Learn to use the Raspberry Pi and its other components like the DHT11 or breadboards.

3. Utilize HTML, CSS, and JavaScript to access and present the data from the DHT11.

Organization

We plan our organizing our work on GitHub and Discord. GitHub allows us to work on the projects independently and merge the work when it's ready, and Discord allows us to collaborate together in real time. The total work will be shared or distributed depending on the situation. A situation may come up where one of us may be busy or have other plans, or one of us is well-versed in the current assignment. Work may be distributed unevenly, but it will be discussed and agreed upon. The VMs will be used in a similar manner, where it will be used to work together on assignments and projects.