SE 319: Construction of User Interfaces

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Final Project Documentation

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Software Description

This program enables a client to remotely view the temperature and humidity of wherever the sensor is set up. The DHT11 temperature and humidity sensor is connected to a raspberry pi which runs a program to record the data and regularly make post requests to the database to save it. A Node server handles the post requests from the raspberry pi as well as all other requests coming from the REACT application.

The REACT application requires a user to log in with an email and password before accessing the core content. Once a user enters the main page, the most recent one hundred readings from the database are immediately organized and displayed for the user. This page also displays the number of readings stored in the database and gives the user the option to clear all but the most recent 100 readings.

The ‘Company’ view allows the user to see information about the client, Wan Yeen Tradings, including a company description and contact information. The ‘Developers’ view displays information about the course and the wonderful team that developed this software.

Software Functionality Diagram

Files and Directory Architecture

-Description and Diagram of files

-Description and diagram of client -server architecture

-Description and Diagram of logical architecture

-Database and API diagram

-Explanation of each web view

Installation manual (software and configuration)

Copy of the Code