Annoying Alarm Clock Documentation

**The Annoying Alarm Clock is a personal project to learn about the Arduino. Throughout this project, I’ve personally learned numerous things, such as creating a web server with NodeJS, handling POST and GET requests, using NodeJS to run child processes, using the Raspberry Pi to communicate with the Arduino, creating a mobile-friendly website, and using JavaScript to handle more advanced HTML things, and more.**

**Raspberry Pi The Raspberry Pi is used to send Serial data over USB to the Arduino. The Raspberry Pi hosts a web server using express, and the Pi has its own Wi-Fi Hotspot, meaning the user will have to connect to the Pi’s Wi-Fi. The Pi listens on *192.168.6.1* on port *8080*, meaning the user will have to connect to ‘*192.168.6.1:8080/home*’. The home page displays 3 buttons, *Create Alarm, See Alarm(s),* and *Stop*.**

**Create Alarm will open a webpage */create-alarm*, and will present an input for time and another input for making alarm name. A button is also there to submit the alarm. When the user hits the *Submit*****button, the website will send a POST request, and the Pi will check if that alarm’s name already exists. If the alarm already exists, it will not allow the user to save the alarm, otherwise it will add to the map of alarms.**

***See Alarm(s)* will open another webpage */list-alarms*. If there are no alarms made, the page will show that there are no alarms, however if there are alarms, the page will show a list of alarms and each of the alarms are buttons, which will allow the user to edit the alarm or delete them.**