



This is the front end for the Tunnel Boring Machine for the Diggeridoos. I made the layout of the page, and implemented the TBM Status component, the Load Sensors component, and the Navigation component.

The TBM Status component utilizes a button that was imported from React Bootstrap, and has capabilities of being disabled in certain states of the machine like in idle or suspended states. The distance bar gathers information from the backend and makes the necessary calculations to display the distance the machine has drilled.

The Load Sensor component gathers data from the back end and accordingly updates the amount of stress the load sensors are enduring. When the sensor value is in range of the safe values, the sensor readings are displayed as green, and red when they are out of range. All of this data is relayed to the front end which updates the GUI as necessary.

The Navigation component indicates the path of the machine. The red crosshairs indicate the direction of the desired path, and the black crosshairs indicate the current trajectory of the machine. The machine can then be guided as necessary to dig straight.