

For data collection I would use Arduino + Node + Express + Johnny-Five.

The database I'd use MongoDB Atlas for being secure, for providing structural flexibility quickly, for being scalable, designed for greater productivity, easily manageable in addition to its high performance.

The data being stored in JSON format makes it easy to use.

The choice of Node with Express is because we can listen to a port and make requests from Arduino as if it were for a web server. And since Node is asynchronous and not blocking in nature, I think this could be the best choice for this case of collecting data from machines every 1 minute per machine.

For the web application I would use the MERN stack as I am already using Mongo, Express and Node. Now it's enough to include React to generate pages with reports, making only the necessary data flow, besides using the same language in the entire stack, Javascript.