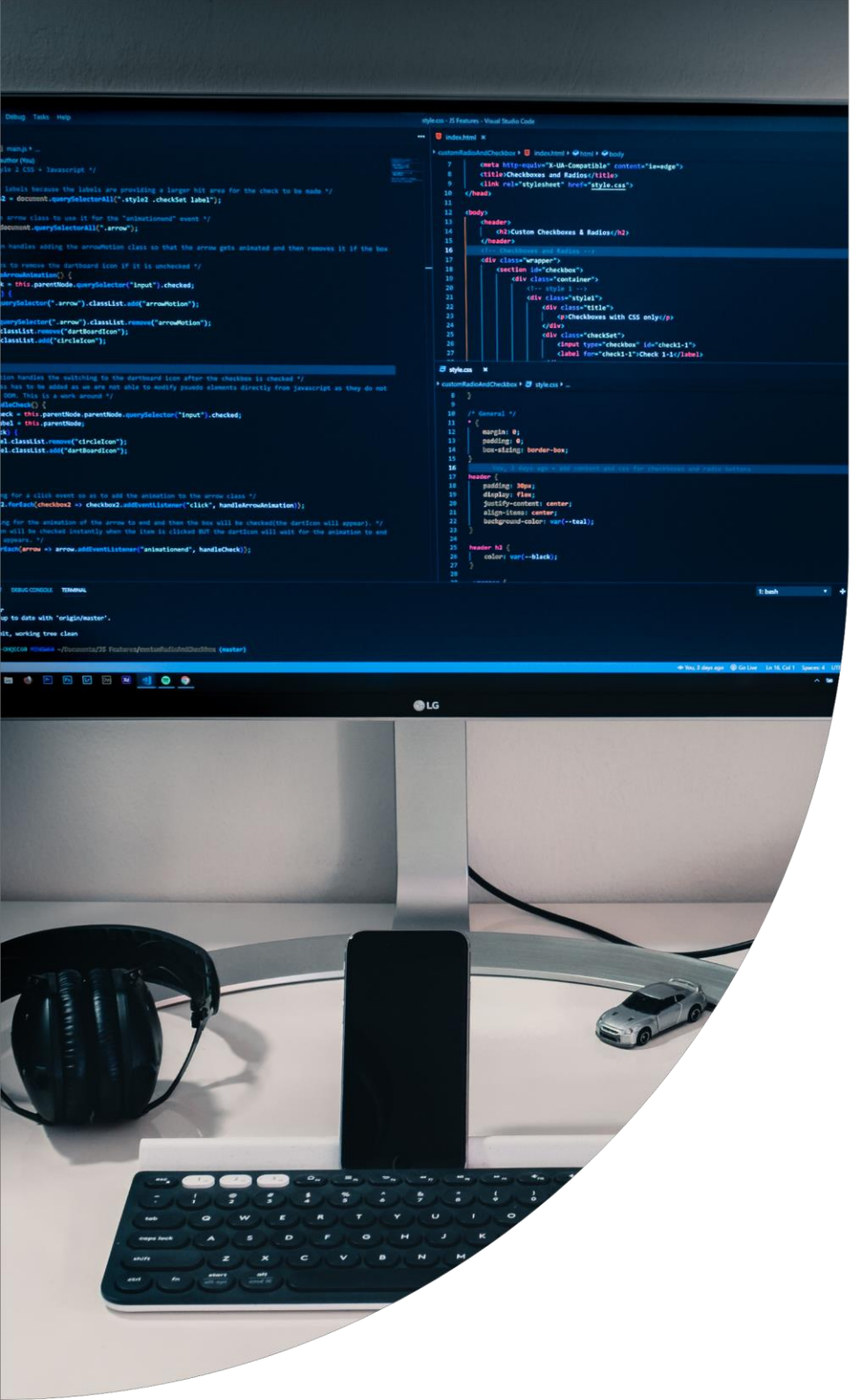

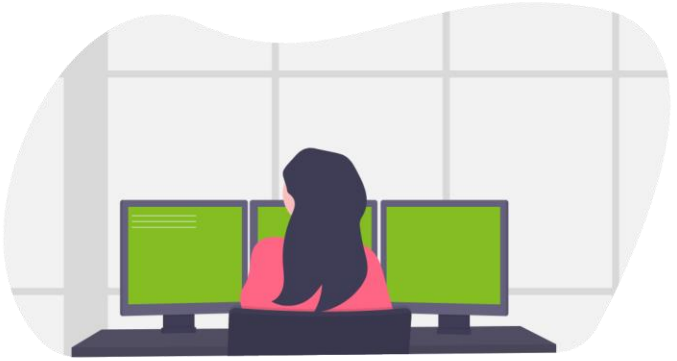

Software Development Proposal

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1. Overview

Daikibo Industrials, a global leader in the manufacturing of heavy machinery, was founded and headquartered in Tokyo, Japan. Daikibo is in the process of integrating IIoT (Industrial Internet-of-Things) devices to monitor measure and analyze their manufacturing processes. The project is aimed at ensuring to find and provide a solution to the problem of the Downtime of machines. The Industry has four factories in different locations. Each factory has nine types of machine which collects telemetry data. By using the telemetry data and some calculations the problem can be solved by expanding at a factory level, as well as device level (showing history of statuses) with possible recommendations.

2. Scope

The scope of the project is to find the Downtime machines in different locations by analyzing the status rate of the machine at a factory level, as well as device level.

The factories are:

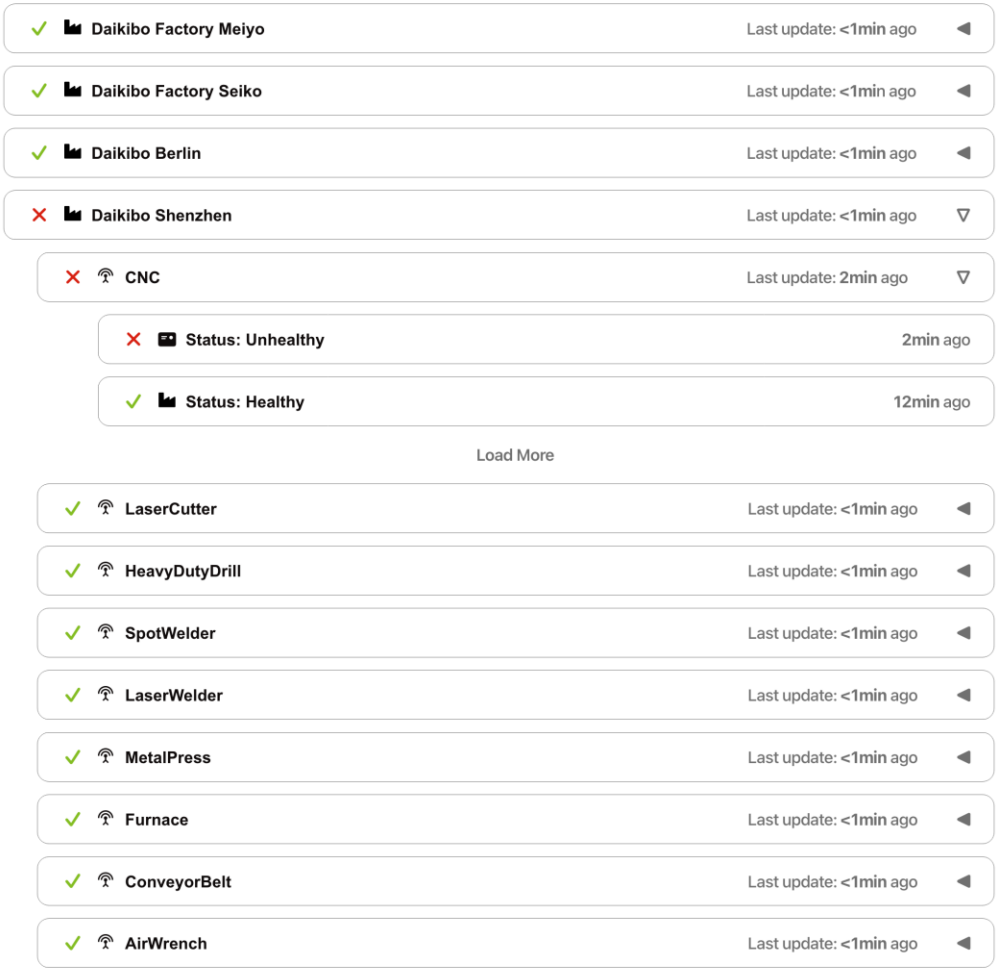
1. Daikibo Factory Meiyo
2. Daikibo Factory Seiko
3. Daikibo Berlin
4. Daikibo Shenzen

The Machines are:

1. CNC
2. LaserCutter
3. HeavyDutyDrill
4. SpotWelder
5. LaseWelder
6. MetalPress
7. Furnace
8. Conveyor Belt
9. Air Wrench

There is an analysis required for the task and merging all the data with eliminating all error and NULL values. The following are the steps that will be performed to achieve the objective of the project are:

1. Collecting the telemetry data included four factories and nine types of machines.
2. Calculating Unhealthy rate with the help of status of the machine to measure how long was the downtime of different pieces of the different manufacturing processes.
3. Declaring a condition of 10 min to find the downtime machine that takes a long time to send a message since messages are sent every 10 min.
4. Find the Downtime per Factory
5. Find the Downtime per Machine
6. Combine the two findings of factory and machine.
7. Filter the Downtime rate of the factory per machine.
8. Create an Interactive Dashboard. (single page, listing the current statuses of all monitored devices)


Daikibo Factory Meiyo
Last update: <1min ago
Daikibo Factory Seiko
Last update: <1min ago
Daikibo Berlin
Last update: <1min ago
Daikibo Shenzhen
Last update: <1min ago
CNC
Last update: 2min ago
Status: Unhealthy
2min ago
Status: Healthy
12min ago
Load More
LaserCutter
Last update: <1min ago
HeavyDutyDrill
Last update: <1min ago
SpotWelder
Last update: <1min ago
LaserWelder
Last update: <1min ago
MetalPress
Last update: <1min ago
Furnace
Last update: <1min ago
ConveyorBelt
Last update: <1min ago
AirWrench
Last update: <1min ago

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3. Estimate

The total number of man-hours included the entire required task that has been done with the help of tools as

Minimum Time: 40min/day

Average time: 65min/day

Maximum Time: 90min/day

Total time: 1 week

The breakdown time of the project during Development, Testing, and Integration of the product in the client's Intranet:

Development: 160min

Testing: 80min

Integration: 120min

4. Timeline

1. [1st of September 2021] **Requirement Collection & Analysis**
2. [2nd of September 2021] **Design**
3. [3rd of September 2021] **Coding**
4. [4th of September 2021] **Integration**
5. [4th of September 2021] **Development**
6. [6th of September 2021] **Testing**
7. [7th of September 2021] **Deployment**

5. Support

At Deloitte, we pride ourselves on our customer service. If the client ever has issues with the product (bug fixes, support tickets, new functionality), our development team will provide continuous service to solve the problem after validation.

(Terms & Conditions Apply based on customer service policy)