Project Overview

**Problem:** The company currently utilizes a curing process to manufacture some of its products. The current system is inefficient and confusing. Multiple products are being cured simultaneously, but they require different curing times. The main problem is human error and unreliable timing methods, resulting in products being removed prematurely. This error costs the company both time and resources.

**Solution:** Create an automated self-timing device and monitoring system. Able to notify the user which products are ready, and which products are still in the curing process. Prevents user error of removing items incorrectly.

System Use Flow Chart:

- **Initiate with Barcode Scan**
- **HMI displays product info.**
- **Location/Module is assigned**
- **Item Placed within Curing Station**
- **Curation Complete**
- **Lock Actuator Activates**
- **Item cures for set duration**
- **Module Display Activates**

Timer Module Indications:
- Yellow – In Progress
- Green – Ready/Open
- Red – Error

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