**Project Title: Development and Implementation of Retort Sterilization Application for . . Tastybite India**

Prepared By- Tushar Musale Date- 07-01-2025

**Situation / Problem-**

Tastybite India currently lacks an automated and integrated system to monitor, control, and document the sterilization process in retort machines. This manual approach is time-consuming, prone to errors, and inefficient in meeting regulatory compliance standards.

**Purpose Statement (Goals):**

The purpose of this project is to analyze, design, and implement a Retort Sterilization Application to enhance operational efficiency, ensure regulatory compliance, and improve product quality through automation and real-time monitoring.

**Project Objectives:**

* **Automated Process Control:** Implement a solution to control and monitor sterilization cycles precisely.
* **Data Logging and Traceability:** Ensure comprehensive data recording for regulatory compliance and audits.
* **User-friendly Interface:** Provide an intuitive dashboard for operators and supervisors.
* **System Integration:** Enable seamless integration with hardware (PLCs, IoT devices) and enterprise systems (ERP, LIMS).
* **Compliance Adherence:** Meet FDA, HACCP, and other relevant regulatory standards.

**Success Criteria:**

* **Enhanced Data Accessibility:** Improve availability and accessibility of sterilization cycle records, logs, and reports.
* **Reduced Downtime:** Minimize system-related delays through efficient automation.
* **Improved Operational Efficiency:** Ensure faster cycle processing and reduced manual intervention.
* **Regulatory Compliance:** Successfully pass regulatory audits with the system-generated reports.