**CMIS-4900-400**

**Fall 2025**

**Team 2 Project Scope Definition**

**Problem Description:**

Production data is currently only tracked by three out of four departments at Kiczan Manufacturing. This data is tracked using a Microsoft Access database and Microsoft Excel workbook. For management at Kiczan Manufacturing to accurately track work orders through the fabrication process after a purchase order is received from a customer, the fourth departments data must be included to guarantee accuracy across all data for the entire shop. To achieve this, an information system must be implemented and deployed to four user terminals, consisting of an intuitive and easy to navigate front end interface, a database to store and query production data, and a programmed back end to facilitate data exchange and manipulation.

**Anticipated Business Benefits:**

* Work order production data input by fabrication department managers at their terminals.
* Accurate record storage with identifiable attributes.
* Record retrieval and sort mechanisms to present department managers with accurate production data.
* Query by specific date and ranges, as well as part numbers, customer, and operator to observe volume.
* Reduce the occurrence of work orders completed past their scheduled delivery date.
* Retrieve data in the event of lost physical work order to prevent the occurrence of redundant production.
* Multi user access will provide those with access the ability to find sought after information in a self-reliant manner.

**System Capabilities:**

* Database table structure written in SQL and host on MySQL DBMS.
* SQL queries written as stored procedures that serve the needs of department managers.
* A simple and intuitive front end written in Microsoft Forms that provides ease of use.
* A backend written in C# to facilitate the database connection, data transfer, and data manipulation.
* A backend written with modularity and customization, to allow for the possibility of additional functionality as needed in the future.
* Returned query results presented to the user in a row and column table structure.

**Risk Analysis:**

* **Feasibility Evaluation:**
  + **Organizational/Culture:** Kiczan Manufacturing follows a horizontal organization structure comprised of four departments, sales, quality, machining, and fabrication. Each department manager has expressed an interest in the need for a centralized information source to ensure that the jobs received have been entered into the businesses production process.
  + **Technological:** C#, MySQL, and Windows Form apps will be the technology stack utilized during the implementation of the information system. Hardware necessities will be fulfilled by existing onsite hardware which consists of preexisting work terminals for the application to be installed on, and an onsite Windows OS server to host the database itself through MySQL DBMS.
  + **Schedule:**
  + **Resources:**
* **Constraints and Limitations:**

**Context Diagram:**

**A diagram of a production data system

AI-generated content may be incorrect.**