**Time Clock Application**

The goal of this application is to record and report employee time. The application will have two interfaces. The main interface will be used by employees to clock in and out, go on break, and receive management messages. The administrative interface will be used to monitor employee status, create messages, perform CRUD (create, read, update, delete) actions on departments, holidays, time segments, breaks, segment types, pay types, and pay rules. Also, the data will be able to be exported to payroll software (Sage MAS90).

We will be working as a team on this project.

**Time Clock Database Description**

1. Each department is described by the name, location, number, and if lunch breaks are paid. The department number is unique.
2. A location is described by the id, name, address, city, state, zip, country and the pay information id. The id is unique.
3. The pay type is described by an id, a description, the weekly max, the daily max, and the next pay type (once thresholds are met). The pay type is unique.
4. A punch type is described by an id, description, and a pay type. The id is unique.
5. A punch is described by a punch id, employee id, the in and out times, punch type, and the department. The punch id is unique.
6. A timecard represents a collection of punches for a given pay period and is described by the employee, the pay period, and timecard id. The timecard id is unique.
7. The timecard lines represent a single line on a time card. They are described by a line number, timecard id, an employee id, punch id, pay type id, split start time, and split end time. The combination of line number and timecard are unique.
8. An employee is described by first and last name, middle initial, manager id, pin, id (alpha numeric to match payroll software), department, and employment status. The employee id is unique.
9. Messages are described by a message id, manager id, and the message text. The message id is unique.
10. Messages for indicate which employees will receive a given message. It is described by a message id, employee id, and whether or not it is pending. The combination of message id and employee id are unique.
11. Holidays are described by an id, date, and whether or not it repeats. The holiday id is unique.
12. Holidays held are described by a department id and holiday id.