

Simple Time Clock Application

Create an application that represents a simple time clock. You are free to use the programming language of your choice. The application must follow the requirements listed below.

- Allow user to be identified using a unique ID assigned to each employee.
 - Users that cannot be identified should not be able to use the application.
- Allow users to start a work shift.
 - Do not allow users to start multiple shifts simultaneously.
- Allow users to end a work shift.
 - Do not allow users to start a shift during an active shift.
- Allow users to start/end a break, but only during an active shift.
 - Do not allow employees to end a shift if a break is active.
- Allow users to start/end a lunch, but only during an active shift.
 - Do not allow employees to end a shift if a lunch is active.
- All shift data performed by users should be recorded and made available upon returning to the application.
- (Optional) Allow new users to register themselves in the application.
- (Optional) Allow for two types of users in the application; administrators and non-administrators.
- (Optional) Allow administrators to perform any function at any time regardless of the rules stated previously.
- (Optional) Allow administrators to view a summary report section that summarizes all the employee's shift activity.
 - (Optional) Allow administrators to filter the report data.