User Access Control System

Craftsman Automation is a leading engineering organization offers wide range of engineering products and Manufacturing services. In order to secure the Organizational confidential data, the organization made a decision to enhance their Access Control System to a real time process. Following are key functions to be developed using GUI based technology. The Organization also implemented a solid Relational Database Management System for Data storage, retrieval and processing.

* User and Password maintenance
  + Individual User
  + Bulk Users
  + Password should be captured, stored and retrieved in encrypted manner (Through SQL query Password should not be visible)
* Department Master (Read Only)
* Training Master (Read Only)
* Role Master (Read Only)
* Employee-Department Transaction (Read Only)
* Employee-Role Transaction (Read Only)
* Develop a Business Rule to control user access during login to achieve the following
  + Validate user against Organizational User DB
  + Validate Password against Password DB
  + For all Valid Users after authentication, Organizational Home Page should be displayed (Main Menu).
  + Develop an Authorization procedure to show only required menu options based on their department and role. For E.g HR Employee after log in should be able to see HR Page fully enabled. All Other Department Pages must be protected. But all Employees must be able to view their pay slip from Payroll Page.
  + Password must be changed after every 60 days. A reminder to change password must be sent 1 week prior to the expiry. On or after 60 days of password expiry user should be allowed to login only after changing password. Changed password must comply to password strength rule and should not match any of the old password.
  + Terminate user access for all resigned employees