

IPT Semester 1 – Product 2 – Minor Project

Information System for Trapdoor Industries

IDENTIFICATION

PROBLEM IDENTIFICATION: What are the requirements of this project?

The main task is to create an Information System for the project scenario of “Trapdoor Industries” and to design, develop and evaluate the database within PHPMyAdmin and MySQL. The project is required to use SQL to produce functionality for the “Trapdoor Industries” database and apply the stated functionality as a minimum, though further queries can be added.

RATIONALE: Why is the project being undertaken?

“Trapdoor Industries” wish to move the employee details and payroll aspect of their operation to an online interface to simplify search and automate the majority of their operation.

SPECIFICATION

OBJECTIVES: What are the general objectives of the information system?

- The information system to be built is to be comprised of a database and a user interface.
- The database should have multiple tables for employee details, payroll, tax and shifts.
- The Employee Details table will store employee information as well as their bank details.
- Payroll and tax tables will require arithmetic operations to calculate the majority of the values.
- Tables should have different levels of user access
- A form will be required to log in to the information system using User ID and a password

AUDIENCE: List the intended users who will interact with this information system?

- ‘Employee’ (1)
 - Read/Write - Own employee info and bank details
 - Read - Own Payroll/Tax information
 - Read//Write - Clocking on/off for self
- ‘Manager’ (2)
 - Read/Write - Own employee and bank details
 - Read - Own Payroll/Tax Information
 - Read/Write - ‘Employee’ Payroll Information
 - Read/Write - Clocking on/off for employee and self
- ‘Payroll Officer’ (3)
 - Read - Clocking on/off for Managers and Employees
 - Read/Write - Pay for Manager/Employee
 - Read/Write - Tax for Manager/Employee
- ‘Administrator’ (4)
 - Read/Write - All information except bank details

Elementary Sentences: Formalize relationships between information?

- User with userID ... has access level [1/2/3/4]
- User with userID ... has firstName with name ...
- User with userID ... has lastName with name ...
- User with userID ... has password with characters ...
- User with userID ... has accountID with ID ...
- User with userID ... has BSB with number ...
- User with userID ... has email with email ...
- User with userID ... has phoneNo with number ...

- User with userID ... has shift with shiftID ...
- User with userID ... has payRate with rate ...
- Roster with rosterID ... has shifts with shiftID
- Roster with rosterID ... has startDate with date ...
- Roster with rosterID ... has endDate with date ...
- Shift with shiftID ... has date with date ...
- Shift with shiftID ... has clockIn with time ...
- Shift with shiftID ... has clockOff with time ...