

Semester: Fall 2015

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General GuideLines

- All projects must have:
 - User management
 - User login
 - User types
- “**Manage**” keyword = Add / Edit / Delete / Search

Inventory management system

Project description

- You are asked to build an application used in Supermarkets and pharmacies
- The user can do the following
 - Enter new product type with all its data(name, type, brand, quantity, supplier....)
 - Each product item should have its id, production date, expiry date.
 - Edit data of the product (modify its data or delete the product).
 - View data of the product in the form of full report
 - When the application is opened it should notify with the list of the products which quantity is about to be finished and also the products that are about to expire.
 - The system should have a full data of the suppliers of the products and their data (name, company, address, phone number, last purchase order.....)
 - The user should be able to request a purchase order to request a quantity of the missing product.
 - The application should support a statistics report of the most used products and most requested one by the customers.

Banking System

Project description

- You are asked to build an application used in banks.
- The system should have the following functionalities:
- It will have two views
 - 1) Login as a user(bank customer)
 - 2) Login as a bank employee

View (1):

Login as a user

The user should be able to:

- 1- Login to the user account (No one can access his data except after entering a correct username and password).
- 2- It should take a record of all user transactions and save them in a file.
- 3- Display data (when needed) about the account of the logged in user (balance, transactions).
- 4- Also it can display to the user new offers and promotions

View (2):

Login as a bank employee

The employee should be able to

- 1- Login to his account.
- 2- Manage customers' accounts (add a new account, remove account, add balance to account, remove balance....)
- 3- Add new promotions to be displayed to the user.
- 4- Increase the customer's balance by adding to the balance the needed interest rate (it shouldn't be more than 5%).
- 5- The employee's GUI should be more professional than the customer's.

Hospital management system

Project description

- You are asked to build an application used in hospitals.
- The system should have the following functionalities(to be used by the hospital receptionist, doctors and nursing):
 - Enter the patient's name and all his data should be displayed (name, ID, room number, age, height, weight....) also data like (his case and health problems, needed medications, checkup date and time.....).
 - Data can be manipulated (add , edit , remove patient's data).
 - Note that Patient's photo should be attached with his data.
 - Give a notification when the application is open to alarm if a patient should have a checkup soon.
 - In addition to the patient's data the system should have a complete dataset of the Doctor's working in the hospital and the field of each doctor

- Also when the receptionist adds a new patient to the system , it should recommend a certain doctor according to the problem the patient is suffering from.
- Also when a new patient is added he should be assigned to a certain room according to the available rooms in the needed department.
- Finally it should organize the reservation of out patients' clinics of the hospital according to the available appointments(the numbering to the patients should be given sequentially).
If there are 4 patients in the dentist clinic then when a new patient reserves he should be given number 5.

Hotel reservation system

Project description

- You are asked to build an application used in Hotels by hotel's receptionist
- The system should have the following functionalities:
 - The receptionist should be able to enter the guest's data (name, age, ID number, check in date, check out date, deposit left by the guest.....etc).
 - You are supposed to have in your hotel different classes of rooms and also of guests.
 - On opening the application, it should display a list of the guests whose checkout date is within less than one day.
 - When entering a new guest the application should display all the available rooms with their data (room number, number of beds,etc).

- The receptionist should be able to enter the data of any additional services used by the guest (gym, SPA, Safari, glass boat , transportation.....etc).
- Any additional services used by the guest should be added automatically to the total cache that will be paid at the end of the residence period.
- The system should have an option to display the details of the check paid by the guest.

Strategy Game

Project description

- The game simulates Age of Empire/ strong hold strategy games with console interface
- Different profiles for each player
- Different civilizations with each has own army units.
- Units are buildings, defending and attacking units
- Units are different in description according to civilization
- The system show reports and statistics on each civilization
- The game shows different type of maps and difficulty levels
- Players can trade together in multiplayer game
- They can attack places together
- You can group several units and mark as groups
- Reports for each player winning games and economy must be issued.