

TP2 : 20%

Remax Windows Application

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| **Course Identification** | |
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| Program’s Name – Code: | **TECHNIQUES DE L’INFORMATIQUE -SPECIALISATION EN INFORMATIQUE DE GESTION (420.A0/A)**  **PROGRAMMEUR ANALYSTE EN TECHNOLOGIES DE L'INFORMATION (LEA.3Q)** |
| Course Title : | **Events Programming** |
| Course Number : | **420-P46-AS** |
| Group: |  |
| Teacher’s Name : | Fodé Toure |
| Session: | Winter 2017 |

PROJECT TITLE: Administration’s Application For Remax

Description :

Students must analyse, conceive and build a window based application thats will allow the real estate broker REMAX to manage its employees (agents), clients (buyers and sellers) and products (houses).

The User Functionality Requirements

These are the functionalities of the Remax application :

* F1 : The Admin (with full access) manages Employees (admin et agents), Houses, Clients (Buyers and Sellers) and Sales (Bonus +5).
* F2 : The Agent manages ONLY his own Clients (Buyers and Sellers) and Houses (And Sales Bonus +5).
* F3 : Any User can search for a one particular or all the Houses (by reference number) and for a particular or all Agents (by employee number).

The Analysis Functionality Requirements

This program should be a multi-tiers application (Gui, Business and Datasource Layers).

*- GUI Layer*:

Window C# Application with MDI (multiple documents interface) based on the user functionality requirements.

*- BUSINESS Layer*:

Library of classes for the entities : Company, Employees(User, Admin or Agent), Clients(Buyer or Seller) and Houses.

- *DATASOURCE Layer*:

Class that encapsulates the database (access) and provides public interfaces for feeding data to the business layer and writing data back to the database.

Microsoft Access database that will contains all the needed data for Remax (Sales bonus +5).

The Technical Functionality Requirements

* For the GUI Layer : Use friendly and thematic (Remax related colors and images) windows forms interfaces.
* For the Business Layer : Apply Object Oriented Concepts like classification (inheritance, composition and aggregate), encapsulation (dotNet’s objects).
* For the Datasource Layer : Use Ado.net.

Evaluation criterias

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| Functions | Points |
| GUI : (Interface + User Friendly) | (10 + 10) = 20 |
| BUSINESS Layer | Total = 30 |
| - BUS : Distinct entities (Employee, Agent..) | + 20 |
| - BUS : OO Concepts (Inheritance, composition..) | + 10 |
| DATASOURCE Layer | Total = 50 |
| - DAT : Transition Class between DB & Bus. layer | + 10 |
| - DAT : Use of Ado.net | + 30 |
| - DAT : Database creation with Microsoft Access | + 10 |
| BONUS (Sale Transaction: class, interface and DB) | + 15 |
| TOTAL | 115 |

Date of submission : the 30th of April 2017