Assignment:

"GUI keeps track of MMU student's enrollment."

1. Remedial Course – put in UML " Class Diagram

    - English

    -Mathematics

    -Chemistry

    -Art

2. Level

    1 Matriculation
    - Engineering
    -IT
    -Business
    -Law

    2 Undergraduate

    -Engineering
    -IT
    -Business
    -Law

    3 Postgraduate

    -Engineering
    -IT
    -Business
    -Law

    Students can take course traditional ways after another a,b,c (e.g. undergraduate course followed by postgraduate course.)

// difficult

3. University

   Introduce a unique financing program, where students can stack several courses together.
   (e.g. during enrollment,) = student can stack up matriculation, undergraduate, postgraduate to get promotion rate when they move on to the next level.

   - Basically, tied with same institute from level 1 till 3, with certain percentage of discount for new level.
   - Secure the discount, save money from increasing price of Institute over the time.

   Currently the seniority levels
   of the program are as follows:
   Level 1: Remedial courses, Matriculation
   Level 2: Undergraduate
   Level 3: Postgraduate

   Students moving from level 1 to another level in the stack scheme will be discounted 10 on the overall fess of the next course.
   - the discount rate might be changed in future.

4. Others

   Extra fees

- accommodation fee,	optional, apply to student who wants it.
-Network fee,	mandatory
-Library fee,	mandatory
-Club and Society fee	mandatory

   - The mandatory fee is automatically added to billing.

5. Finances

   Issues a bill listing all the ordered courses with a sum pay.
   - in the bills, need to state the price before discount, the discount amount and the payable after discount (if any)

   Create me east to navigate user interface which is user friendly and attractive.

Questions:

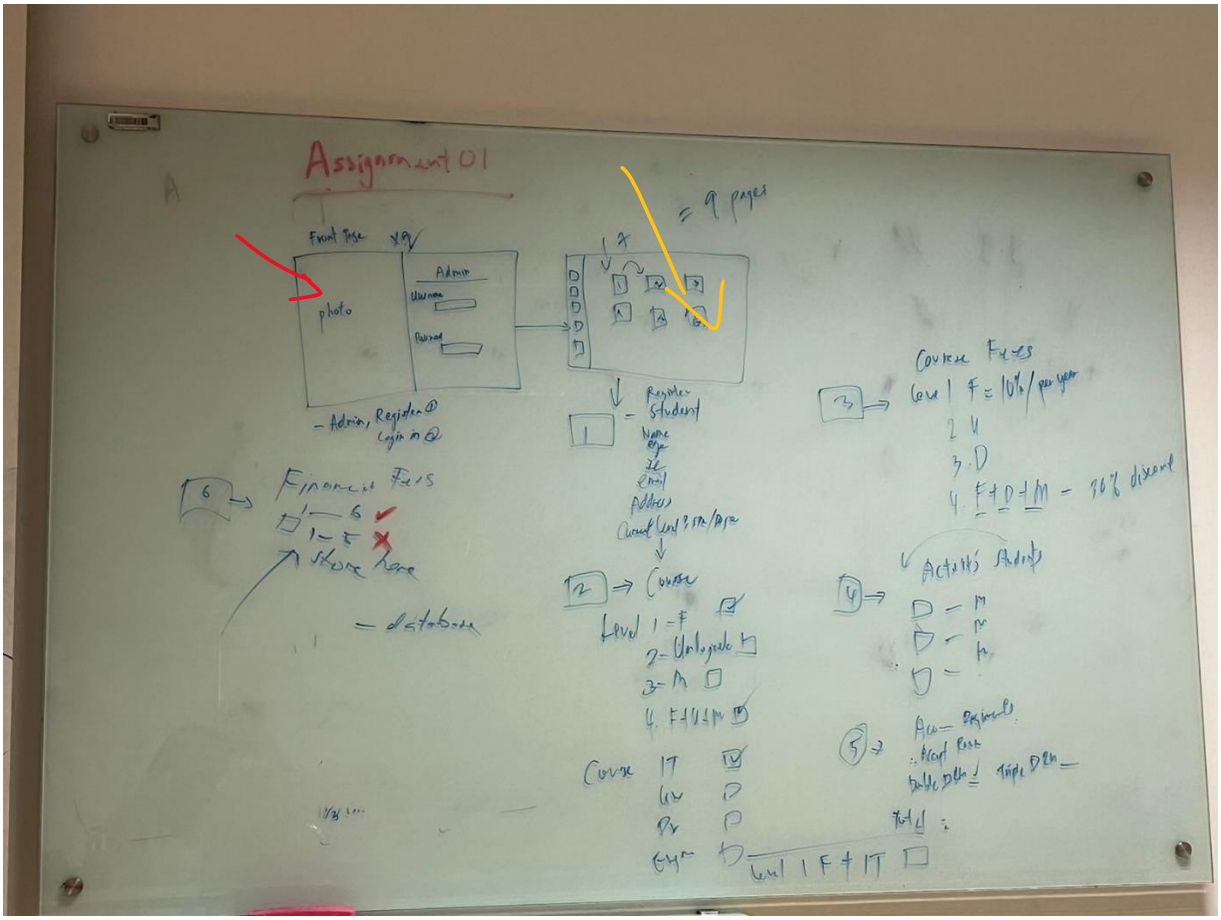
1. Draw UML diagrams such as use case diagram, a complete class diagram, and sequence diagrams for the requirement above. Make sure you use the correct UML symbols.

2. Apply at least one design pattern in your design. Reflect it in the complete class diagram (as done in question 1). Pick design pattern from the following: Composite, Adapter, Bridge, Façade, Iterator, Observer, Builder, Prototype, Singleton. You must justify why you picked the design pattern. Do not use any. other design patterns.
- https://cs.lmu.edu/~ray/notes/examplepatterns/

3. Implement a Java Swing GUI program for the design as per question 1 and 2. You need to have event handling and interactions. Also make sure the UML diagram design and the coding are coherent.

// Details //

Brief Assignment= https://www.youtube.com/watch?v=gSbLapJ1okk



9 /06 – 15/06

Explanation- we do code first !, then check, then uml diagram

Red = Admin – just admin. // Nicole
Front page – registration, log in // Nicole

Orange = To the portal system

6 Button =

1. Register the student // Intan

2. Select Course base on What level //Intan
   - select the majoring
     - IT, LAW, BUSINESS, ENG

3.Course Fee //Myra

- Level 1 Foundation, no discount = 1 year
- Level 2 Underg, 10 % per year = 3 year
- Level 3 Master, 10 % per year = 1.5 year

- Special Case = Combination for M, U, M = 30 % per package. // tba

4. Student Activity // farhan

One-time deals, = Rm 160 until graduate.

-Network fee,	mandatory
-Library fee,	mandatory
-Club and Society fee	mandatory

5.Hostel // Farhan

Require hostel? Yes or no

Triple room, Double room?

6. Finances fees // myra
   - details everything from button 1 till 5
   - excel, mr neoh/ database

Total Pages
2 front admin

6 buttons,
Inside 1 page = Total Pages