



**BIRZEIT UNIVERSITY**  
**Computer Science Department**  
 Software Engineering (COMP 433)  
 First Semester 2004/2005

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Test Two

Student Name ~~\_\_\_\_\_~~

7/12/2004

Student ID: ~~\_\_\_\_\_~~

1. What is the goal of business process engineering?

The purpose of business process engineering is to build (to examine) the organization and ~~architecture~~ ~~artituchure~~ ~~structure~~ that enable the business to use information efficiently, and to exit with ~~useable~~ ~~product~~ useable product.

2. What models are created during the analysis phase of a software development process? What is the purpose of each?

1. information (Data) model: the purpose to assembly the Requirement about the system and the environment. From stakeholders, users.

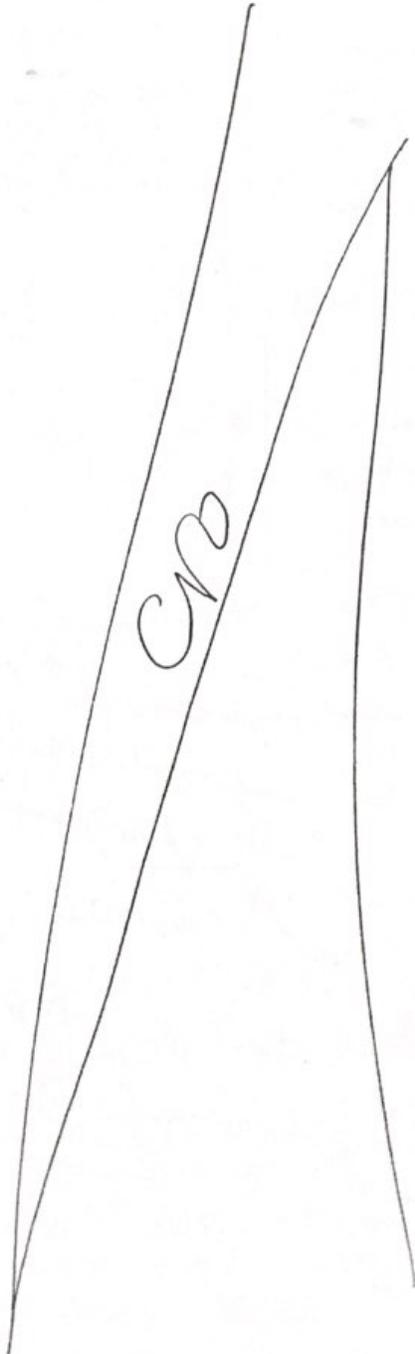
2. behavioral model: the purpose to determined (Deter) the event which will occurs on the Data.

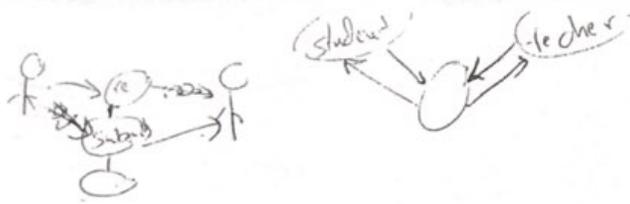
3. Functional model: The purpose ~~to~~ ~~transmit~~ transmission the Data ~~for~~.

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3. List three problem space elements or solution space elements that should be considered as candidate classes.





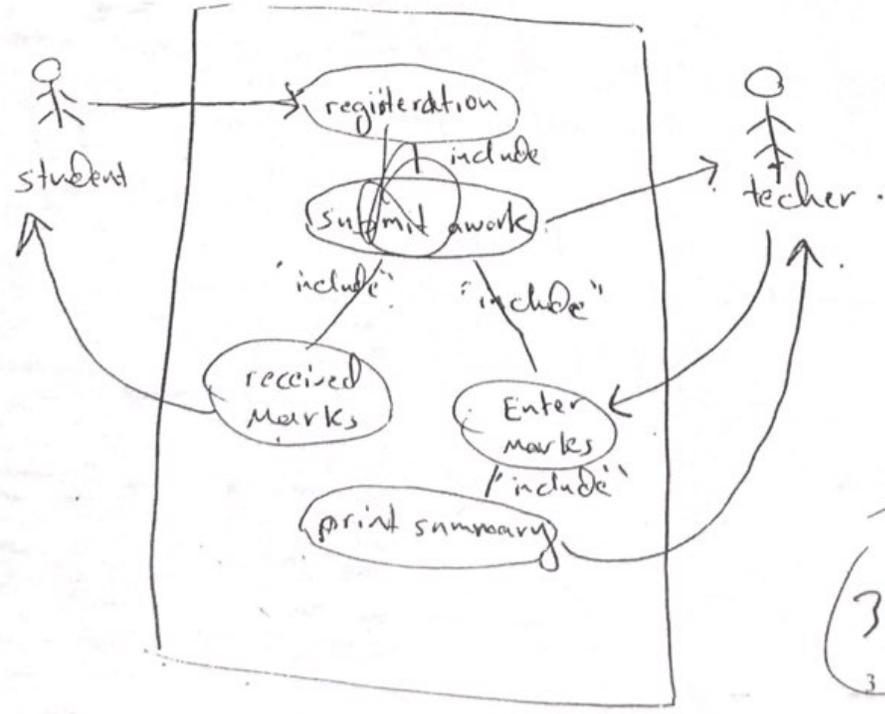
narrative  
 name of  
 Actor  
 Descr

A.14

4. A system is to be developed to support the management of exercises completed by students taking a course. Students first meet with the course tutor to register for the course, and then during the course they submit a number of pieces of work. At any point, a student can find out from the system the marks they have received for any exercises already completed. The course tutor can enter a mark for a piece of work, and print out a summary of the marks gained by all students on the course.

- Identify suitable use cases, and draw a use case diagram for this system.
- Provide a narrative description for two of the above use cases.
- Based on the use cases specify and document two requirements one functional and another non-functional using the template given in the lecture hand out.

- (a) use cases:
- Identify
1. registration.
  2. submit a work.
  3. received marks.
  4. Enter a marks.
  5. print summary.



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use-cases model.

narrative use-cases :

name : registration.

Actor : Student.

Description : To registration the course which the student want it.

Pre-condition :

Must the student ~~has~~ finished all the courses need (Culaw) to it this course.

~~the page registration page opened.~~

main flow :

1. The student will open the registration page
2. Then student choose the ~~which~~ course which he want to registered it.
3. Then the student click button register.

Exception flow :

if the student ~~did~~ didn't finished the all the courses need to registration the course.

Post condition :

if the use case finished successfully the Database will change and add the new student, else the system print message the registration is not complete.

2) name : received marks

Actor : Student.

Description : To ~~received~~ find out- From the system the marks they have received.

Pre-condition : The student submit ~~the~~ pieces of work.

main flow :

1. The student will open received page.
2. The student will choose, ~~the~~ what is the mark he want to received.
3. The system will show the mark.

Exception flow : if the student ~~do~~

if the teacher doesn't enter the mark (add the

Req# : 1      Reqtype : non-functional<sup>al</sup>  
event/use case : registration  
source : student  
Description : To registration the course.  
Rational : To registration the course which the student it want, To finish this course  
Fit-critical : the student can registration more than one course ~~the~~ with the same teacher  
Customer satisfaction : 4  
Customer Dissatisfaction : 5  
Conflict : none  
Dependence : none  
History : 14/12/2024



Req# : 2      Reqtype : Functional      source : student  
event/use case : Received marks  
Description : To Find out from the system the marks they have received.  
Rational : at any point the student can received there marks.  
Fit-critical : <sup>the student</sup> can received all ~~marks~~ his mark  
Customer ~~satis~~ satisfaction : 4  
Customer Dissatisfaction : 5  
Conflict : none  
Dependence : Enter a mark  
History : 14/12/2024