**Relational Schema**

User(user\_id)

Admin(user\_id)

Supervisor(user\_id,name,faculty,email)

Student(user\_id,first\_name,last\_name,email,type,gpa,address,faculty, sup\_id)

………..

Student.sup\_id *references* Supervisor

Student\_mob\_number(user\_id,mob\_number)

………….

Student\_mob\_number.user\_id *references* Student

nonGUCian(user\_id)

Course(course\_id,code,creditHrs,fee)

take\_course(stu\_id,course\_id,grade)

……….. ……………..

take\_course.stu\_id references Student

take\_course.course\_id references Course

GUCian(user\_id,undergrad\_id)

Thesis(serialNo,title,type,field,startDate,endDate,seminarDate, noOfExtensions,noOfYears,stu\_id,pay\_id,pay\_completed)

………… …………

Where: Thesis.noOfYears = Thesis.endDate – Thesis.startDate

Thesis.stu\_id *references* Student

Thesis.pay\_id *references* Payment

Defense(def\_id,date,grade,location,serialNo,e\_id)

…………. ……...

Defense.serialNo *references* Thesis

Defense.e\_id references Examiner

represent(stu\_id,serialNo,def\_id)

……….. ………….. …………

represent.stu\_id *references* Student

represent.serialNo *references* Thesis

represent.def\_id *references* defense

Examiner(e\_id,name,field,nationality)

evaluate(e\_id,def\_id)

……. ………..

evaluate.e\_id *references* Examiner

evaluate.def\_id references Defense

Examiner\_Defense\_comments(e\_id,def\_id,comment)

…….. ………..

Examiner\_Defense\_comments.(e\_id,def\_id) references evaluate

ProgressReport(prog\_id,description,date,evaluation,progress\_state)

fill(prog\_id,stu\_id,serialNo)

………… ……….. …………..

fill.prog\_id *references* ProgressReport

fill.stu\_id *references* Student

fill.serialNo *references* Thesis

Publication(pub\_id,title,date,host,place,stu\_id,accepted,pay\_id)

……….. …………

Publication.stu\_id *references* Student

Publication.pay\_id *references* Payment

belongs(pub\_id,serialNo)

…………. ……………

belongs.pub\_id references Publication

belongs.serialNo references Thesis

Payment(pay\_id,totalAmount,fundPercent,noOfInstallments)

Installment(pay\_id,ins\_id,status,date,amount)

………..

Installment.pay\_id *references* Payment