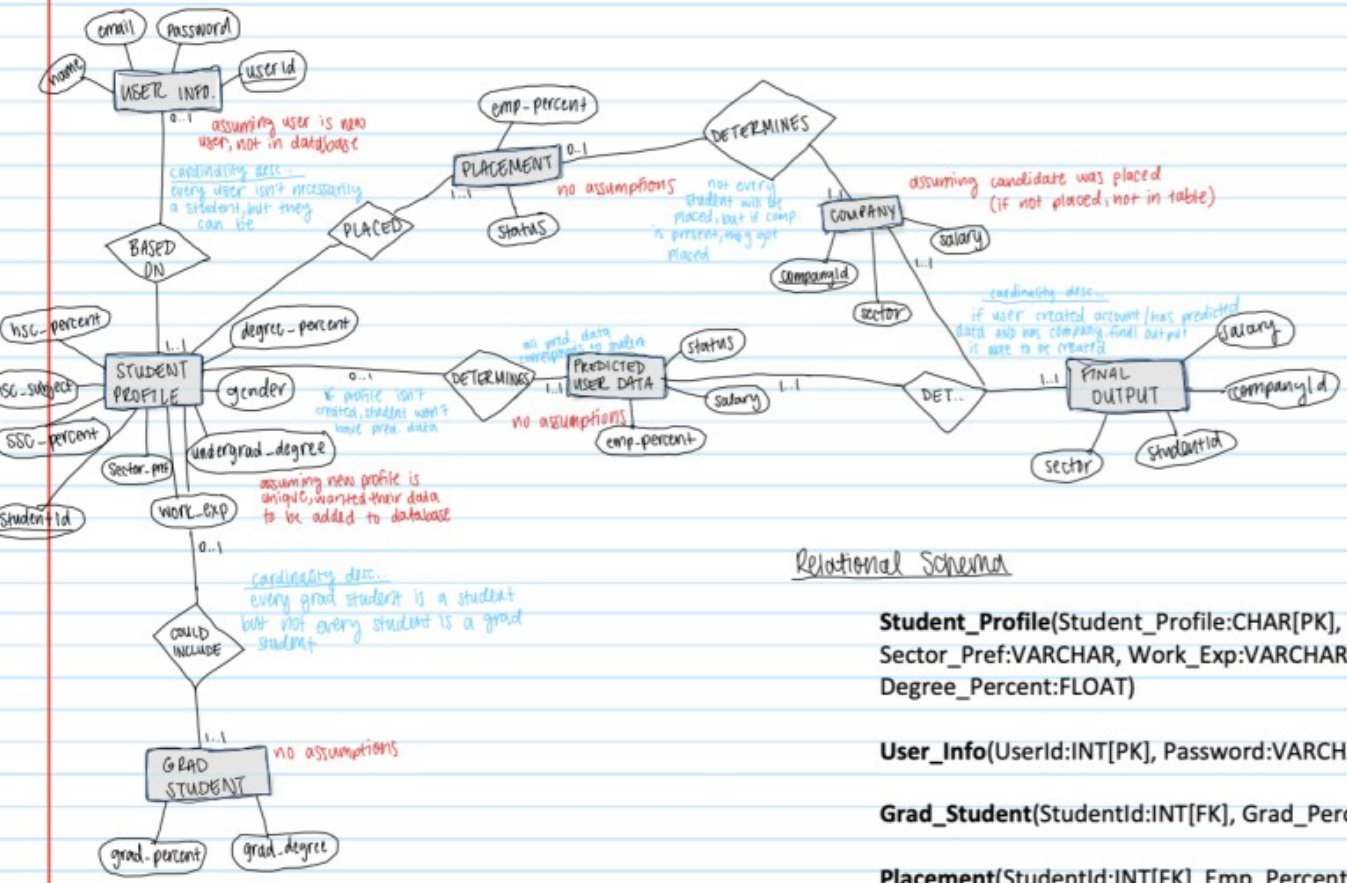
UML/ER diagram

Tuesday, September 26, 2023 5:04 PM



Relational Schema

Student_Profile(Student_Profile:CHAR[PK], HSC_Percent:FLOAT, HSC_Subject:VARCHAR, SSC_Percent:FLOAT, Sector_Pref:VARCHAR, Work_Exp:VARCHAR, Undergrad_Degree:VARCHAR, Gender:VARCHAR, Degree_Percent:FLOAT)

User_Info(UserId:INT[PK], Password:VARCHAR, Email:VARCHAR, Name:CHAR)

Grad_Student(StudentId:INT[FK], Grad_Percent:FLOAT, Grad_Degree:VARCHAR)

Placement(StudentId:INT[FK], Emp_Percent:FLOAT, Status:VARCHAR]

PUD(StudentId[FK], Status:VARCHAR, Salary:INT, Emp_Percent:FLOAT)

Company(CompanyId:INT[PK], Sector:VARCHAR, Salary:INT)

Final_Output(StudentId:VARCHAR[FK], CompanyId:INT[FK], Sector:VARCHAR[FK], Salary:INT[FK]

Functional Dependencies

3NF → our group is more comfortable w/ it & could work w/ our data better

dependent

	L	M	R	N
SP → U1				
P → SP	C	SP	U1	
PUD → SP	PUD	P	GD	
C → P				
SP → GD				
C → PUD				

$\{C\}^+ = \{C, P, SP, U1, GD\}$ $\{C, SP\}^+ = \{C, SP, P, U1\}$

$\{PUD\}^+ = \{PUD, SP, U1\}$ $\{C, SP, P\}^+ = \{C, SP, P, U1\}$

$\{C, SP, PUD\}^+ = \{C, P, SP, GD, PUD, U1\}$

$\{C, PUD\}^+ = \{C, P, SP, PUD, GD, U1\}$