1.

ER:

关系模型:

team (tname , color , captain)
primary key tname.
Foreign key color references color (color)

member (mname , belong_team)
primary key mname.
Foreign key belong_team references team(thame)
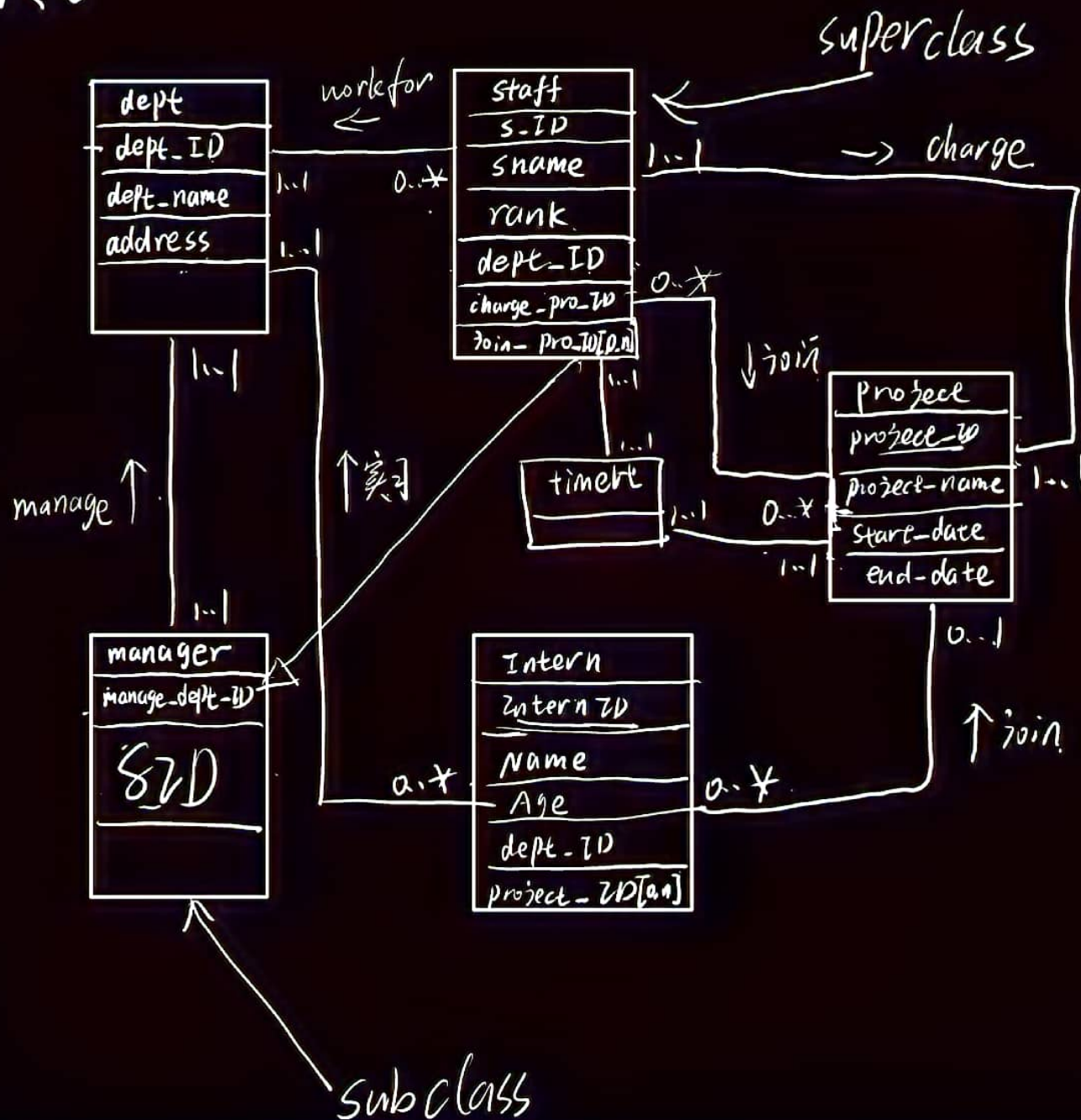
fan (tname , fav_team , fav_member, fav_color)
primary key fname.
Foreign key fav_team references team(tname)
Foreign key fav_color references color (color)
Foreign key fav_member references member(mname)

ZR:

superclass

subclass

关系模型:

dept (dept_ID, dept_name, address)
Primary key dept_ID

Staff (S_ID, sname, rank, dept_ID, charge_pro ID, join_pro_ID[0,n])
Primary key S_ID
Foreign key charge_pro_ID references Project (project_ID)
Foreign key dept_ID references dept (dept_ID)
Foreign key join_pro references project (project_ID)

Time It (S_ID, project_ID 比例))
primary key S_ID, project_ID
foreign key S_ID references Staff (s_ID)
Foreign key project_ID references project (project_ID)

Manager (manage_dept_ID, S_ID)
primary key manage_dept_ID
Foreign key manage_dept_ID references dept (dept_ID)
Foreign key S_ID references staff (S_ID)

Intern (Intern_ID, name, age, dept_ID, project_ID[0,n])
Primary key Intern_ID
Foreign key dept_ID references dept (dept_ID)
Foreign key project_ID references project (project_ID)

project (project_ID, project_name, start_date, end_date)
primary key project_ID