

## Relational Schema

- Company(email, name, address, domain, type, vision, specialization)
- Company\_Phone(company, phone)  
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*Company\_Phone.company references Company*
- Department(code, company, name)  
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*Department.company references Company*
- Job(title, department, company, short\_description, detailed\_description, min\_experience, salary, deadline,  
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no\_of\_vacancies, working\_hours)  
*Job.(department, company) references Department*
- Question(number, question, answer)
- Job\_has\_Question(job, department, company, question)  
-----  
*Job\_has\_Question.(job, department, company) references Job*  
*Job\_has\_Question.question references Question*
- User(username, password, personal\_email, birth\_date, years\_of\_experience, first\_name, middle\_name,  
last\_name, age)  
*Where User.age = current\_date - User.birth\_date*
- User\_Job(user, job)  
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*User\_Job.user references User*
- Job\_Seeker(username)  
-----  
*Job\_Seeker.username references User*
- Staff\_Member(username, annual\_leaves, company\_email, day\_off, salary, job, department, company)  
-----  
*Staff\_Member.username references User*  
*Staff\_Member.(job, department, company) references Job*
- Job\_Seeker\_apply\_Job(job, department, company, job\_seeker, hr\_response, manager\_response, score)  
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*Job\_Seeker\_apply\_Job.(job, department, company) references Job*  
*Job\_Seeker\_apply\_Job.job\_seeker references Job\_Seeker*

- Attendance\_Record(date, staff, start\_time, end\_time)  
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*Attendance\_Record.staff references Staff\_Member*
- Email(serial\_number, subject, date, body)
- Staff\_send\_Email\_Staff(email\_number, recipient, sender)  
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*Staff\_send\_Email\_Staff.email\_number references Email*  
*Staff\_send\_Email\_Staff.recipient references Staff\_Member*  
*Staff\_send\_Email\_Staff.sender references Staff\_Member*
- HR\_Employee(username)  
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*HR\_Employee.username references Staff\_Member*
- Regular\_Employee(username)  
-----  
*Regular\_Employee.username references Staff\_Member*
- Manager(username, type)  
-----  
*Manager.username references Staff\_Member*
- Announcement(date, title, hr\_employee, type, description)  
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*Announcement.hr\_employee references HR\_Employee*
- Request(start\_date, applicant, end\_date, request\_date, total\_days, hr\_employee, hr\_response, manager, manager\_response, manager\_reason)  
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*Request.applicant references Staff\_Member*  
*Request.hr\_employee references HR\_Employee*  
*Request.manager references Manager*  
*Where Request.total\_days = Request.end\_date - Request.start\_date*
- Leave\_Request(start\_date, applicant, type)  
-----  
*Leave\_Request.(start\_date, applicant) references Request*
- Business\_Trip\_Request(start\_date, applicant, destination, purpose)  
-----  
*Business\_Trip\_Request.(start\_date, applicant) references Request*
- HR\_Employee\_apply\_replace\_Request(start\_date, applicant, hr\_employee, replacement)  
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*HR\_Employee\_apply\_replace\_Request.(start\_date, applicant) references Request*  
*HR\_Employee\_apply\_replace\_Request.hr\_employee references HR\_Employee*  
*HR\_Employee\_apply\_replace\_Request.replacement references HR\_Employee*

- Regular\_Employee\_apply\_replace\_Request(start\_date, applicant, reg\_employee, replacement)  
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*Regular\_Employee\_apply\_replace\_Request.(start\_date, applicant) references Request*  
*Regular\_Employee\_apply\_replace\_Request.reg\_employee references Regular\_Employee*  
*Regular\_Employee\_apply\_replace\_Request.replacement references Regular\_Employee*
- Manager\_apply\_replace\_Request(start\_date, applicant, manager, replacement)  
-----  
*Manager\_apply\_replace\_Request.(start\_date, applicant) references Request*  
*Manager\_apply\_replace\_Request.manager references Manager*  
*Manager\_apply\_replace\_Request.replacement references Manager*
- Project(name, company, start\_date, end\_date, manager)  
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*Project.company references Company*  
*Project.manager references Manager*
- Manager\_assign\_Regular\_Employee\_Project(project\_name, company, regular\_employee, manager)  
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*Manager\_assign\_Regular\_Employee\_Project.(project\_name, company) references Project*  
*Manager\_assign\_Regular\_Employee\_Project.regular\_employee references Regular\_Employee*  
*Manager\_assign\_Regular\_Employee\_Project.manager references Manager*
- Task(name, project, company, deadline, status, description, regular\_employee, manager)  
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*Task.(project, company) references Project*  
*Task.regular\_employee references Regular\_Employee*  
*Task.manager references Manager*
- Task\_Comment(task\_name, project, company, comment)  
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*Task\_Comment.(task\_name, project, company) references Task*