

# Schema

**COMPANY**(domain, name, email, address, type, vision, specialization)

**COMPANYPHONE**(domain, phone)

COMPANYPHONE.domain references COMPANY.domain

**DEPARTMENT**(code, domain, name)

DEPARTMENT.domain references COMPANY.domain

**JOB**(jobID, code, HRUsername, title, shortDescription, detailedDescription, workingHours, minYearsOfExperience, salary, vacancies, deadline)

JOB.code references DEPARTMENT.code,

JOB.HRusername references HREMPLOYEE.username

**INTERVIEW**(QUESTION, jobID, answer)

INTERVIEW.jobID references JOB.jobID

**USER**(username, password, email, birthdate, age, firstName, middleName, lastName, yearsOfExperience)

Where USER.age = current date - USER.birthdate

**USERPREVOUISJOBTITLE**(username, title)

USERPREVOUISJOBTITLE.username references USER.username

**APPLICANT**(username)

APPLICANT.username references USER.username

**APPLICATION**(ID, jobID, username, HRUsername, score, HRStatus)

APPLICATION.jobID references JOB.jobID,

APPLICATION.username references APPLICANT.username,

APPLICATION.HRusername references HREMPLOYEE.username

**ACCEPTED**(ID, jobID, username, usernameMang, managerStatus)

ACCEPTED.usernameMang references MANAGER.username

Constraint: ACCEPTED is an Attribute defined relation <= APPLICATION.HRStatus

**REJECTED**(ID, jobID, username)

Constraint: REJECTED is an Attribute defined relation <= APPLICATION.HRStatus

**STAFFMEMBER**(username, code, companyEmail, salary, dayOff, annualLeaves)

STAFFMEMBER.username references USER.username,

STAFFMEMBER.code DEPARTMENT.code

**ATTENDANCE**(username, date, timeOfStart, timeOfLeave)

ATTENDANCE.username references STAFFMEMBER.username

**EMAIL(ID, usernameSender, usernameReceiver, subject, body, timeStamp)**  
Email.(usernameSender, usernameReceiver) references STAFFMEMBER.username

**REQUEST(username, ReqNum, HRusername, requestDate, startDate, endDate, leaveDays)**

REQUEST.username references STAFFMEMBER.username,  
REQUEST.HRusername references HREMPLOYEE.username,  
Where REQUEST.leaveDays = REQUEST.startDate - REQUEST.endDate

**BUSINESSTRIP(username, ReqNum, destination, purpose)**  
BUSINESSTRIP.(username, ReqNum) references REQUEST

**LEAVE(username, ReqNum, type)**  
LEAVE.(username, ReqNum) references REQUEST

**HREMPLOYEE(username)**  
HREMPLOYEE.username references USER.username

**REQUESTHRREPLACE(username, ReqNum, usernameReplacing)**  
REQUESTHRREPLACE.username references HREMPLOYEE.username,  
REQUESTHRREPLACE.ReqNum references REQUEST.ReqNum,  
REQUESTHRREPLACE.usernameReplacing references HREMPLOYEE.username

**ANNOUNCEMENT(ID, HRUsername, title, date, type, description)**  
ANNOUNCEMENT.HRusername references HREMPLOYEE.username

**MANAGER(username, type)**  
MANAGER.username references USER.username

**REQUESTMANGREPLACE(username, ReqNum, usernameReplacing)**  
REQUESTMANGREPLACE.username references MANAGER.username,  
REQUESTMANGREPLACE.ReqNum references REQUEST.ReqNum,  
REQUESTMANGREPLACE.usernameReplacing references MANAGER.username

**MANAGERREQUESTREVIEW(username, ReqNum, usernameMang, reason)**  
MANAGERREQUESTREVIEW.(username, ReNum) references REQUEST,  
MANAGERREQUESTREVIEW.usernameMang references REQUEST.ReqNum

**REGULAREMPLOYEE(username)**  
REGULAREMPLOYEE.username references USER.username

**REQUESTREGEREPLACE(username, ReqNum, usernameReplacing)**  
REQUESTREGEREPLACE.username references REGULAREMPLOYEE.username,  
REQUESTREGEREPLACE.ReqNum references REQUEST.ReqNum,  
REQUESTREGEREPLACE.usernameReplacing references REGULAREMPLOYEE.username

**PROJECT(name, usernameMang, startDate, endDate)**

PROJECT.usernameMang references MANAGER.username

**PROJECTASSIGNMENT(name, usernameRegE, usernameMang)**

PROJECTASSIGNMENT.name references PROJECT.name,

PROJECTASSIGNMENT.usernameRegE references REGULAREMPLOYEE.username,

PROJECTASSIGNMENT.usernameMang references MANAGER.username,

**TASK(name, ProjectName, usernameMang, usernameRegE, description, status, comments, deadline)**

TASK.projectName references PROJECT.name,

TASK.usernameMang references MANAGER.username,

TASK.usernameRegE references REGULAREMPLOYEE.username

**TASKCOMMENT(name, ProjectName, comment)**

TASKCOMMENT.(name, ProjectName) references TASK