Approved By:
Moidul

Project 1, Part 1
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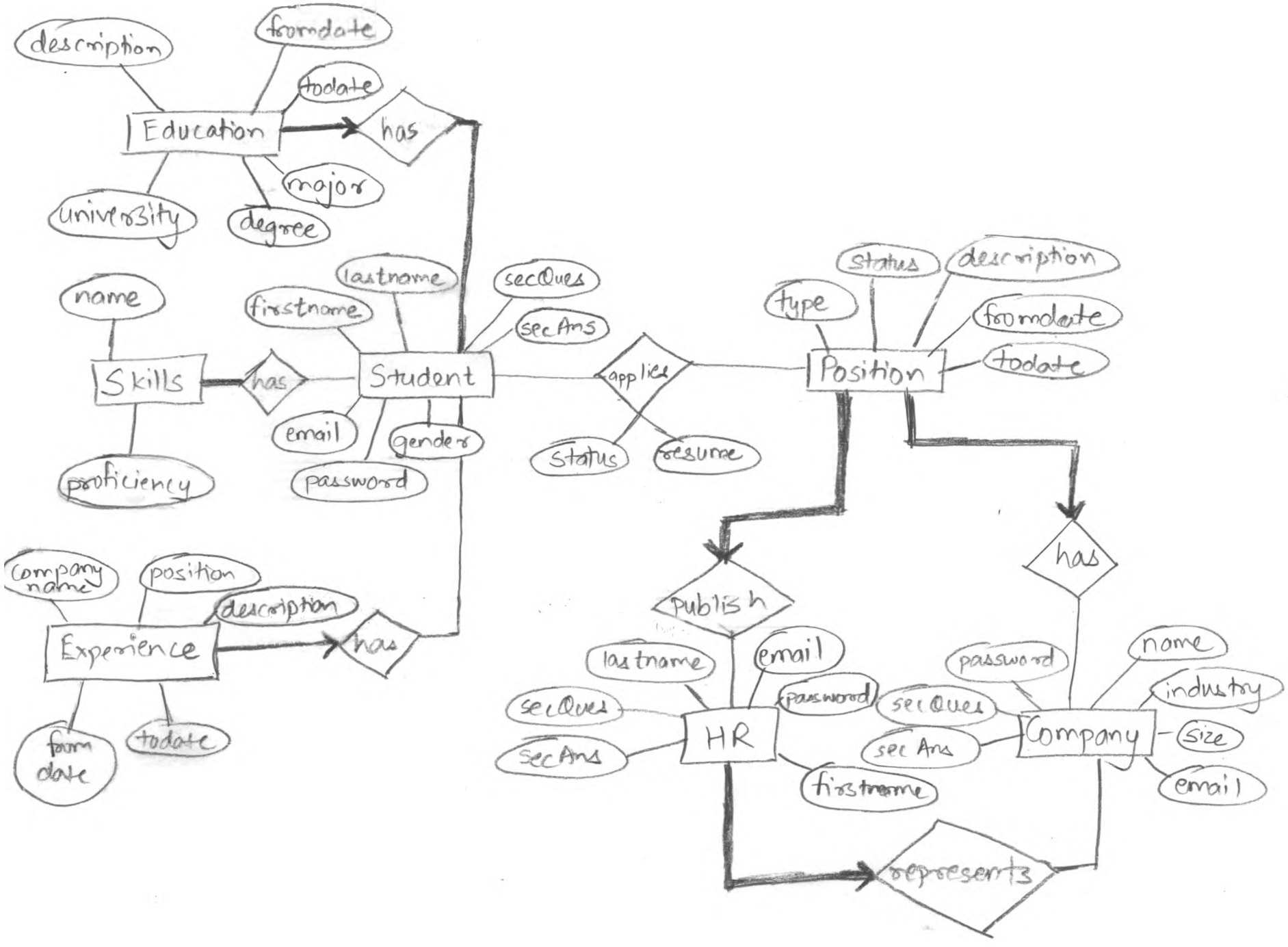
Proposal:

We propose to make an internship application. We will be building a web front end option.

- The main entities in the application will be Student, Company, Position, Recruiter and Application
- Students, Recruiters and Company will have their respective logins
- Recruiters will be able to post positions for the companies that they belong to
- Students can view and apply to different positions with resume
- Recruiters can monitor applications for various positions in their company
- A rough ER diagram is attached with the report.
- Student will have general attributes like email, password, security question, security, answer FirstName, LastName, Gender
- Student is related to entities: Education, Experience and Skills as a part of his profile
- Education has fields: University, description, time period, degree, major
- Experience has fields: Company Name, position, time period, description
- Skills has fields: Name, proficiency.
- Company has the fields: Name, industry, size
- HR has the fields: FirstName, LastName
- Position has the fields: Type, status, description, time period

Contingency Plan:

If one of us drops the course, we will reduce the complexity of the entity and have a general attribute "resume" in the Student entity instead of separately defining Skills, Education and Experience.
Also, Part 3 will be scoped down to a very simple web interface, with only 1 hardcoded recruiter for a company. The student can make a profile and apply for the position.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CREATE DATABASE INTERNAPPDB;
USE INTERNAPPDB;

CREATE TABLE STUDENT (SID INT AUTO_INCREMENT, FIRST_NAME VARCHAR(50) NOT NULL,
LAST_NAME VARCHAR(50) NOT NULL, SEX CHAR(1) NOT NULL, EMAIL VARCHAR(150) NOT NULL
UNIQUE, PASSWORD VARCHAR(30) NOT NULL, SEC_QUESTION VARCHAR(150), SEC_ANSWER
VARCHAR(50), PRIMARY KEY(SID));

CREATE TABLE SKILLS (SKI_NAME VARCHAR(30) NOT NULL, PROFICIENCY INT NOT NULL,
STU_SID INT NOT NULL, PRIMARY KEY(SKI_NAME, STU_SID),
FOREIGN KEY(STU_SID) REFERENCES STUDENT(SID) ON DELETE CASCADE);

CREATE TABLE EXPERIENCE (COMPANY_NAME VARCHAR(30) NOT NULL, POSITION
VARCHAR(30) NOT NULL, FROMDATE DATE NOT NULL, TODATE DATE, DESCRIPTION
VARCHAR(500), STU_SID INT, FOREIGN KEY(STU_SID) REFERENCES STUDENT(SID) ON DELETE
CASCADE, PRIMARY KEY (COMPANY_NAME, POSITION, FROMDATE, TODATE, STU_SID));

CREATE TABLE EDUCATION (UNIVERSITY VARCHAR(50) NOT NULL, DEGREE VARCHAR(50) NOT
NULL, MAJOR VARCHAR(30) NOT NULL, FROMDATE DATE NOT NULL, TODATE DATE,
DESCRIPTION VARCHAR(500), STU_SID INT, FOREIGN KEY(STU_SID) REFERENCES STUDENT(SID)
ON DELETE CASCADE, PRIMARY KEY (UNIVERSITY, DEGREE, MAJOR, FROMDATE, TODATE,
STU_SID));

CREATE TABLE COMPANY (CID INT AUTO_INCREMENT PRIMARY KEY, COMPANY_NAME
VARCHAR(30) NOT NULL UNIQUE, INDUSTRY VARCHAR(30) NOT NULL, SIZE INT NOT NULL,
EMAIL VARCHAR(150) NOT NULL UNIQUE, PASSWORD VARCHAR(30) NOT NULL,
SEC_QUESTION VARCHAR(150), SEC_ANSWER VARCHAR(50));

CREATE TABLE HR (HID INT AUTO_INCREMENT PRIMARY KEY, FIRST_NAME VARCHAR(50) NOT
NULL, LAST_NAME VARCHAR(50) NOT NULL, EMAIL VARCHAR(150) NOT NULL UNIQUE,
PASSWORD VARCHAR(30) NOT NULL, SEC_QUESTION VARCHAR(150), SEC_ANSWER
VARCHAR(50), COM_CID INT, FOREIGN KEY (COM_CID) REFERENCES COMPANY(CID) ON DELETE
CASCADE);

CREATE TABLE JOBPOSITION (PID INT AUTO_INCREMENT PRIMARY KEY, TYPE VARCHAR(30)
NOT NULL, STATUS VARCHAR(10) NOT NULL CHECK (STATUS IN('OPEN','CLOSED')),
DESCRIPTION VARCHAR(500) NOT NULL, FROMDATE DATE, TODATE DATE, HR_HID INT,
COM_CID INT, FOREIGN KEY(HR_HID) REFERENCES HR(HID) ON DELETE SET NULL, FOREIGN
KEY(COM_CID) REFERENCES COMPANY(CID) ON DELETE CASCADE);

CREATE TABLE APPLICATION (PID INT, SID INT, RESUME VARCHAR(50) NOT NULL, STATUS
VARCHAR(10) NOT NULL, PRIMARY KEY(PID, SID),
FOREIGN KEY(PID) REFERENCES JOBPOSITION(PID) ON DELETE CASCADE,
FOREIGN KEY(SID) REFERENCES STUDENT(SID) ON DELETE CASCADE);
```