My database, fubara19418446, represents the following scenario: “Departments in a company advertise vacant positions which require specific skills (e.g., administrative, managerial, etc.). Candidates may be invited to interviews for the positions”.

OPERATING SYSTEM: Windows

SUMMARY:

My database contains 7 tables:

NAME	FUNCTION	ATTRIBUTES	ASSUMPTIONS AND CONSTRAINTS
Candidates	This table represents all the information on each candidate.	-cid (candidate id). PK INT -A cid cannot be listed in more than one row. There is only one unique cid for one person. -The key of a relation is a set of attributes that uniquely identifies tuples of the relation. A set X of attributes of a relation R, is a key of R if it satisfies the following properties: 1.for each status of R, no pair of distinct rows (tuples) t’ and t’’ exist in R such that t’ and t’’ have same value for all attributes in X;	

		2.no proper subset (*) of X satisfies property -Firstname VARCHAR(45) -last name VARCHAR(45), -address VARCHAR(45) -telephone INT.	
Departments	This table represents the company's different departments and details about each	-did (department id) PK INT. A did cannot be listed in more than one row. There is only one unique did for one department. -'Positions' holds a 'Y' or 'N' depending on whether or not a department is offering a position. VARCHAR(45). -Dname (department name) VARCHAR(45) -address VARCHAR(45) -telephone INT.	
Interviews	This table represents all the interviews	-iid (interview id) PK INT.	<u>Constraints:</u> -Multiple candidates can be interviewed for one position.

	and the details of each interview.	-Cid INT -did INT -interview_date VARCHAR(45) -offer VARCHAR(45) -pid INT. Cid, did and pid are foreign keys referencing the cid primary in candidates, the did primary key in departments, and the pid primary key in positions respectively.	-Multiple candidates can be hired for one position. -A candidate can be interviewed more than once for one position, and those two interviews can be on the same day. <u>Assumptions</u> -A candidate can be in a situation where they receive no interviews at all (the department is still reviewing their CV) -One candidate cannot be hired for multiple positions -A candidate is hired when taking into account other factors, not just skill.
Positions	This table represents all available positions and the details surrounding them.	-Skid skill id - PK INT -Pid - PK INT -key(Skills_for_positons) = {skid, pid} -Skid and pid are foreign keys referencing primary key skid in skills, and primary key pid in positions respectively. -Different pid's with the same pid can exist in many rows of the table,	<u>Assumptions:</u> -Multiple departments can hire for the same title. For example, department 16 and 12 are both looking for talent acquisition officers. -A department can offer more than one position. -A department doesn't have to offer any positions

		but only for different skid's.	
Skills	This table represents all information concerning the skills.	-skid (skill id) PK INT. -Typeskill VARCHAR(45), which has the actual skill name. -For example, skid is 101 and typeskill is Admin.	
Skills for Positions	This table has the skills required for each position	-Skid - PK INT -Pid - PK INT -key(Skills_for_positons) = {skid, pid} -Skid and pid are foreign keys referencing primary key skid in skills, and primary key pid in positions respectively. -Different pid's with the same pid can exist in many rows of the table, but only for different skid's.	<u>Constraints</u> A position can require multiple skills.
Skills of candidates.	This table has the skills that each candidate has.	-Skid PK INT -Cid PK INT -key(skills_of_candidates) = {skid, cid}	<u>Constraints:</u> A candidate can have multiple skills.

		-Skid and cid are foreign keys referencing primary key skid in skills, and primary key cid in candidates respectively. -Different cid's with the same cid can exist in many rows of the table, but only for different skid's.	

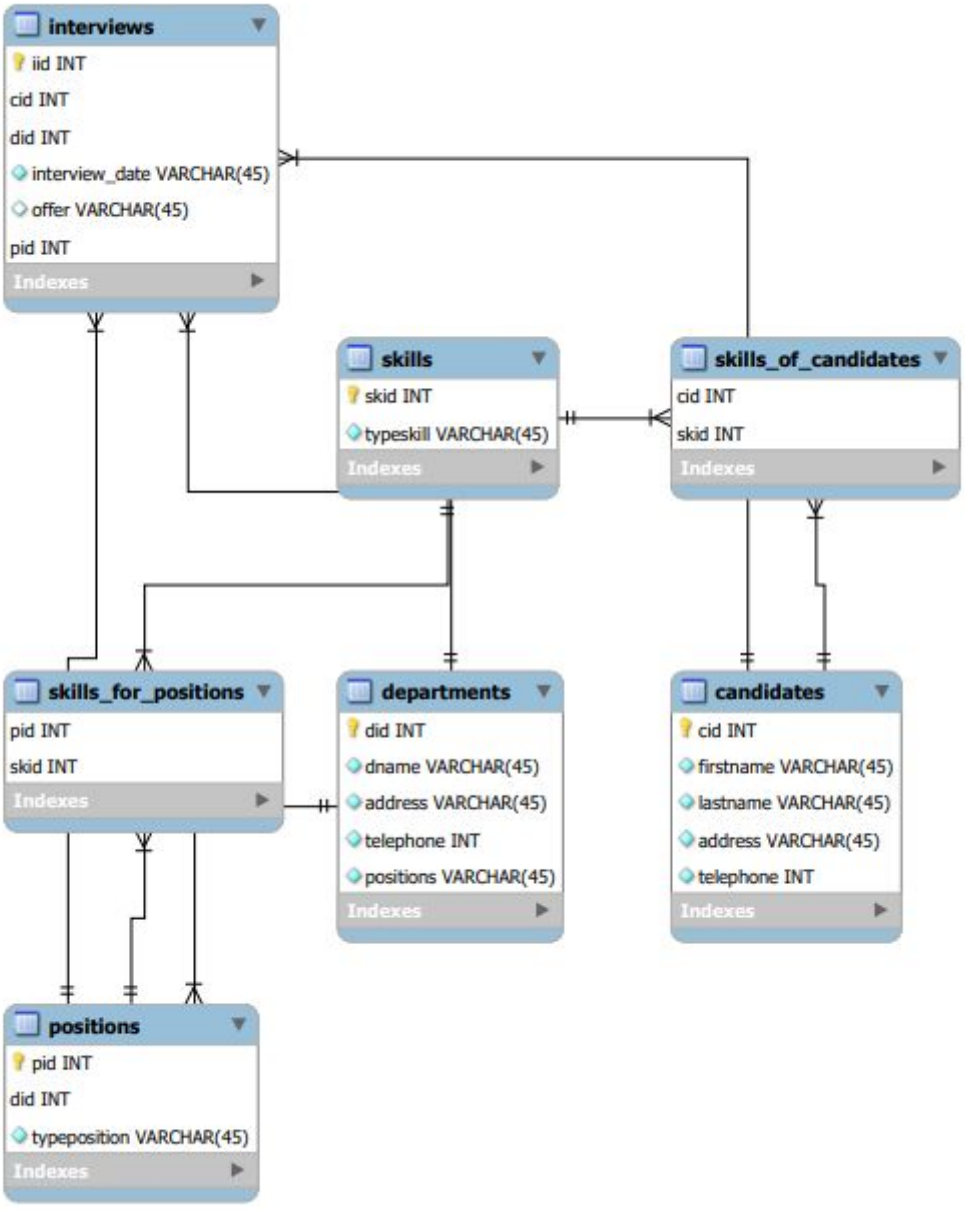
ADDITIONS

- Having different tables for skills, skills for positions and skills for candidates, allows for the reaction policies in skills for positions, and skills for candidates to be established.

REACTION POLICIES

- All foreign keys do not violate referential integrity: if a tuple t, references v1..vn as values of a foreign key, there must be a tuple t' in the referenced relation with key values v1...vn.
- For all foreign keys, the reaction policies 'ON UPDATE, CASCADE' and 'ON DELETE, CASCADE' are applied.
  This is to make sure that when changes or deletions are made to foreign keys in the parent tables, those changes and deletions are applied throughout the entire database, to the child tables.

ER DIAGRAM


interviews
iid INT
cid INT
did INT
interview_date VARCHAR(45)
offer VARCHAR(45)
pid INT
Indexes
skills
skid INT
typeskill VARCHAR(45)
Indexes
skills_of_candidates
cid INT
skid INT
Indexes
skills_for_positions
pid INT
skid INT
Indexes
departments
did INT
dname VARCHAR(45)
address VARCHAR(45)
telephone INT
positions VARCHAR(45)
Indexes
candidates
cid INT
firstname VARCHAR(45)
lastname VARCHAR(45)
address VARCHAR(45)
telephone INT
Indexes
positions
pid INT
did INT
typeposition VARCHAR(45)
Indexes