Relational Model

Resident (Health Insurance Number, Date of registration, gender, date of birth, rname, priority group, phone, address)

Nurse (license number, nname, employer)

Employer is the foreign key referncing vaccination venues

Vaccination Venue (vname , address, zip code, city)

Day (vname, date, number of available vaccines)

vname is the foreign key referencing vaccination venues

Vaccine Type (Manufacturer, No. of required doses)

Batch (Manufacturer, Batch No., manufacturing date, expiry date)

Manufacturer is the foreign key referencing vaccine types

Vial (Manufacturer, Batch No., Vial No.)

Batch No. and manufacturer together is the foreign key referencing batches

Nurse assignment(goes to) (license number, vname, date)

license number is the foreign key referencing nurses

date and vname together is the foreign key referencing days

Batch assignment(sends to) (Manufacturer, Batch No., vname, date)

Manufacturer and Batch No. together is the foreign key referencing batches

Vname is the foreign key referencing days

Vaccination\_Slot (license number, Health Insurance Number, Manufacturer, Batch No., Vial No., vname, date, time interval, room number)

license number is the foreign key referencing nurses

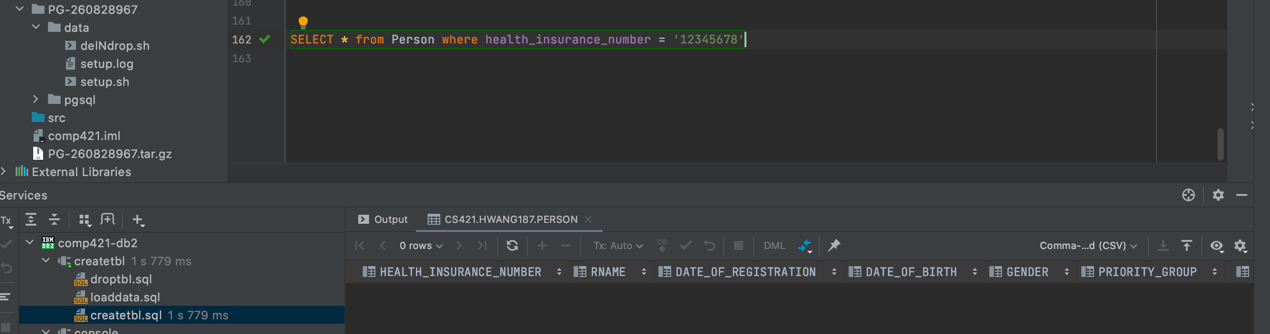
Health Insurance Number is the foreign key referencing residents

Manufacturer, Batch No., and Vial No. together is the foreign key referencing vials

vname, date, time interval, room number together is the foreign key referencing vaccination slots.

For better visualization when grading, all sql commands called by the java program are printed out when they get called.

a)i)



ii)

文本

描述已自动生成

iii)

社交网站的屏幕截图

描述已自动生成

iv)

文本

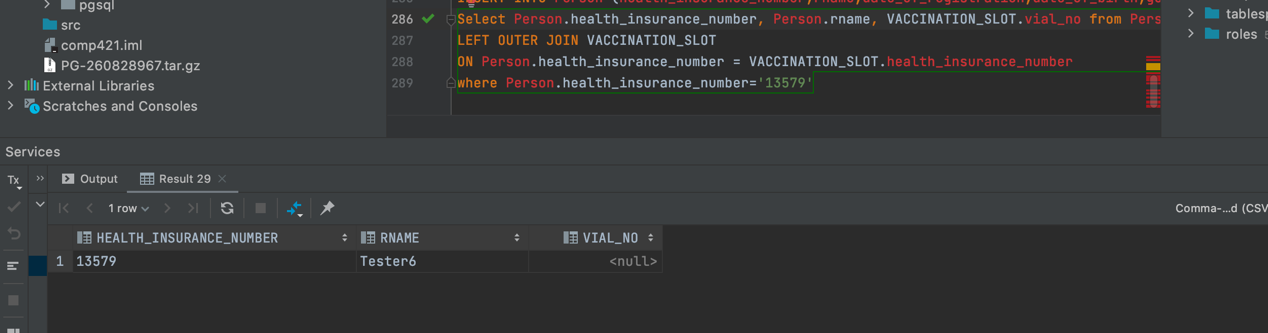
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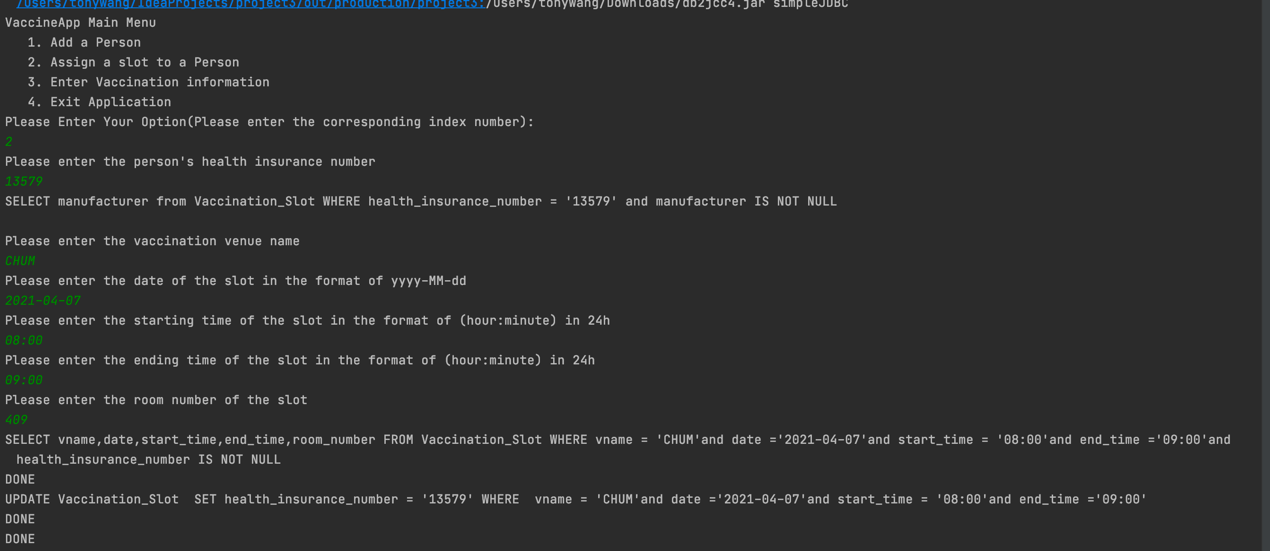
v)

社交网络的手机截图

描述已自动生成

b)i)



ii) 

iii)

截图里有图片

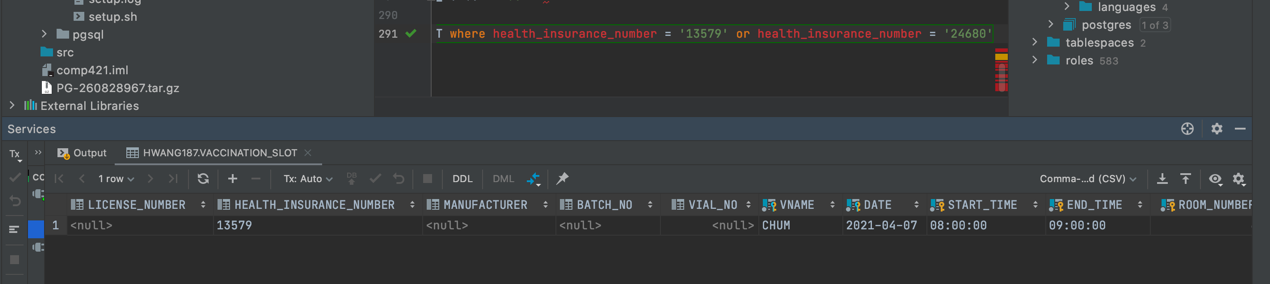
描述已自动生成

iv)

文本

描述已自动生成

v)



c)i)

图形用户界面, 文本, 应用程序, 网站

描述已自动生成

截图里有图片

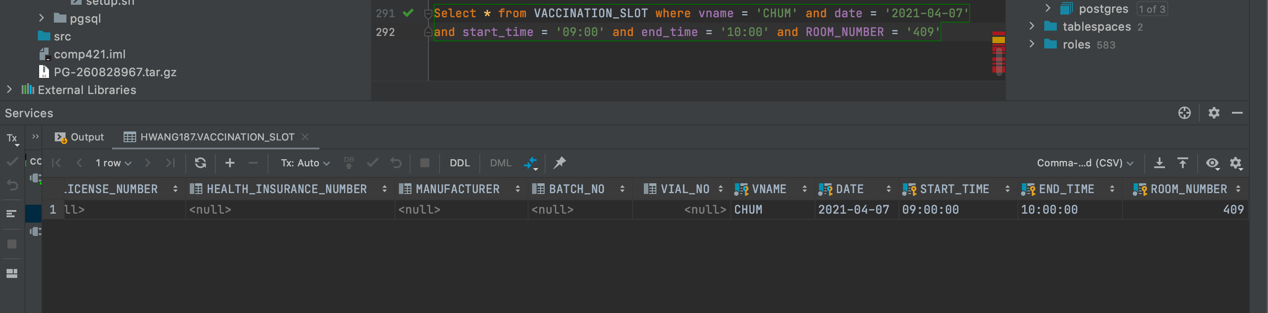
描述已自动生成ii)

iii)

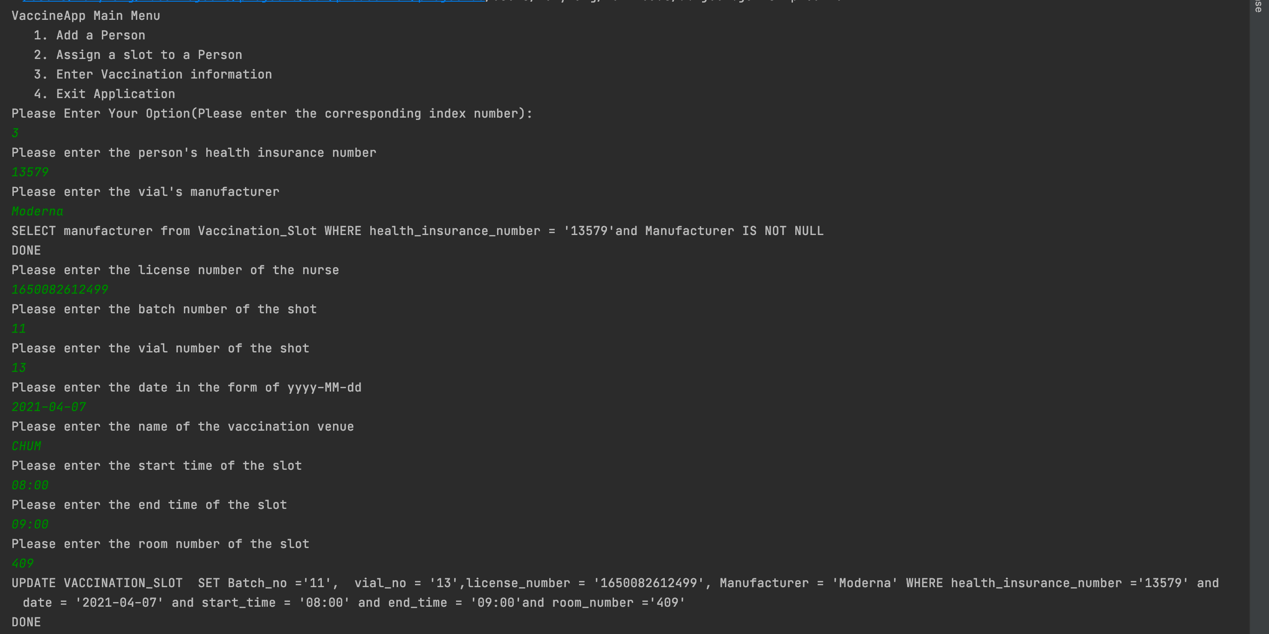
文本

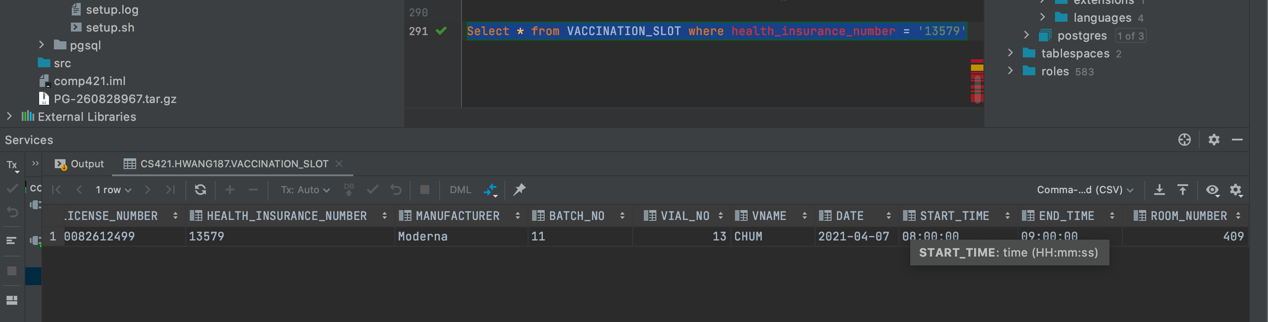
描述已自动生成

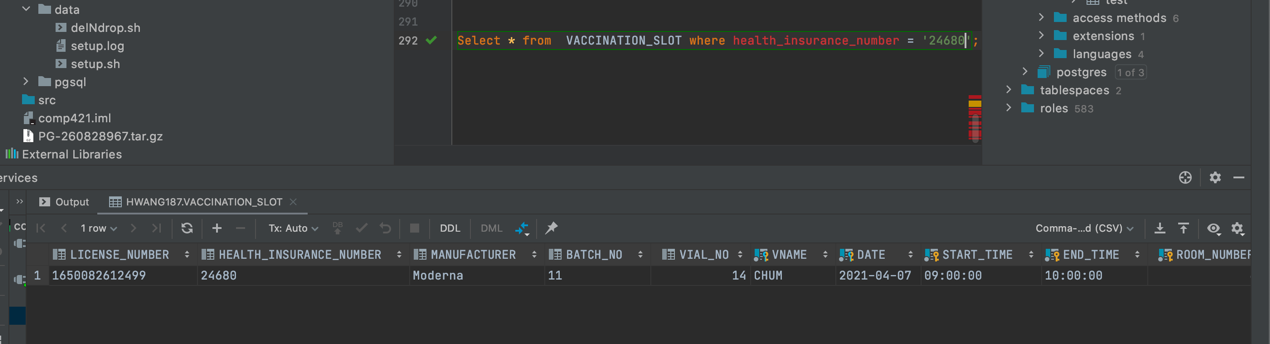
iv)



d)i)

  
ii)



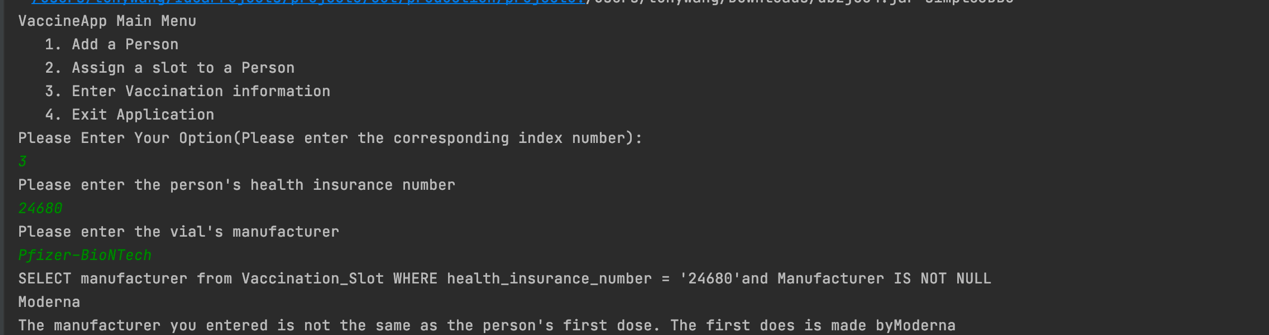
e)i)

ii)

文本

描述已自动生成

iii)



3. Indexing

图形用户界面, 文本, 应用程序

描述已自动生成This index will be about the same as index directly on the primary key(insurance number).

This is because the phone number is also unique to each person, just like insurance number.

In real-life situations, using the phone number might be worse. Because a person can have multiple phone numbers, he/she can also change his/her phone number. Some person might not even have phone numbers. But a person must have a unique health insurance number that never changes.

4. Data Analytics

电脑屏幕的截图

描述已自动生成

图表, 条形图

描述已自动生成