

CS548 Enterprise Software Architecture and Design

Assignment 12: NoSQL Data Modeling

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You can find video and cql script in the rooter folder. `Clinic.sql` contains Test Data(insert commands).

Report

1. List all patients: I create table patient. There are id(UUID), patientId(varchar), name(varchar), birth(date). We just need list all patients, so I set id as primary key.
2. List all providers:I create table provider. There are providerId(UUID), npa(varchar), name(varchar), specialization. We just need list all providers, so I set providerId as primary key.
3. I prepare three types, drug, surgery and radiology for treatment. Drug has name(varchar) and dosage(int). Surgery contains date(date). Radiology includes a list of date.
4. List treatments by patients receiving those treatments. I create table treatmentByPatient. It contains treatmentId(UUID), startDate(date), statYear(int), diagnosis(varchar), patientId(varchar), patientName(varchar), npa(varchar), providerName(varchar), drug(frozen), surgery(frozen), radiology(frozen). I set patientId as Partition key and startDate as clustering key.
5. List treatments by providers providing that treatment. I create table treatmentByProvider. It contains treatmentId(UUID), startDate(date), statYear(int), diagnosis(varchar), patientId(varchar), patientName(varchar), npa(varchar), providerName(varchar), drug(frozen), surgery(frozen), radiology(frozen). I set npa and statYear as Partition keys and startDate as clustering key.