Lesson 6: Principles of Data Manipulation and Management
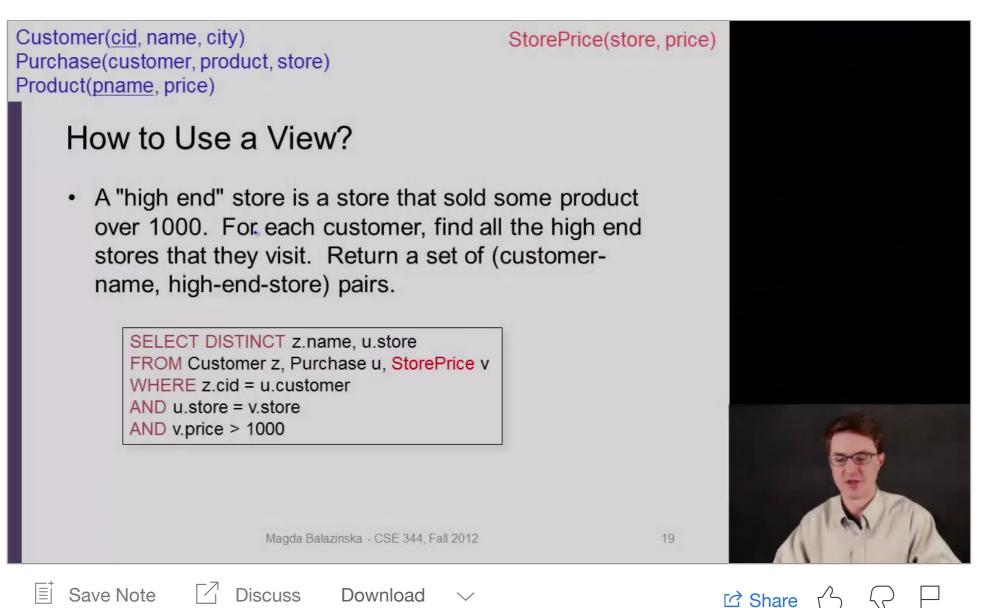
Lesson 7: Relational Algebra

Lesson 8: SQL for Data Science

Lesson 9: Key Principles of Relational Databases

▶ **Video:** Optimization: Physical Query Plans
5 min

▶ **Video:** Optimization: Choosing Physical Plans
4 min

▶ **Video:** Declarative Languages
5 min

▶ **Video:** Declarative Languages: More Examples
4 min

▶ **Video:** Views: Logical Data Independence
5 min

▶ **Video:** Indexes
6 min

Assignment 2: SQL

Indexes

Customer(cid, name, city)
Purchase(customer, product, store)
Product(pname, price)

StorePrice(store, price)

How to Use a View?

- A "high end" store is a store that sold some product over 1000. For each customer, find all the high end stores that they visit. Return a set of (customer-name, high-end-store) pairs.

```
SELECT DISTINCT z.name, u.store
FROM Customer z, Purchase u, StorePrice v
WHERE z.cid = u.customer
AND u.store = v.store
AND v.price > 1000
```

Magda Balazinska - CSE 344, Fall 2012   19

Save Note   Discuss   Download

Share 👍 👎 ⚑

English

Help Us Translate

0:00   [MUSIC] All right, so how do we use these views? Well, an example of why you might want to do this, a high end, let's define a high end store as a store that sold some product for a price over 1000. All right, so a high end boutique store. Then for each customer, find all the high end stores that they visit and return a set of customer name high end store pairs.

0:24   In this case, this is a fairly complicated query. But now we've got a definition of high end store that others can use in their own queries if they wanna access. Actually, I didn't do a very good job of explaining this. This is actually exercising the view we just defined in the previous slide.