

CSCE 310

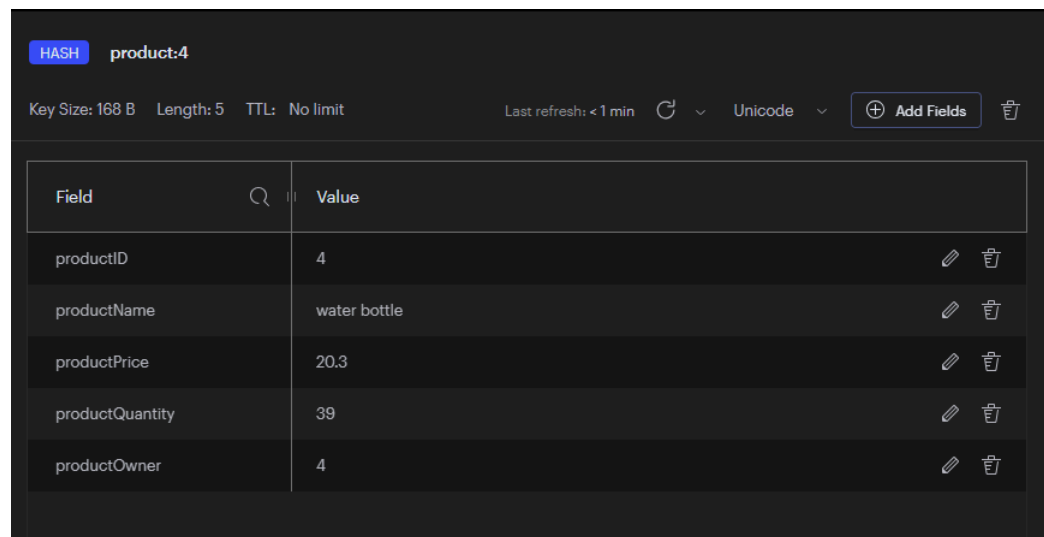
Project 2 - Database Structure

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The design of my database for Project two is relatively similar to project 1, but with a few fewer classes. The only classes we will need is users, products, and orders. The structure of all three are below:

- Products: (in Redis is “project: {insert id}”, I use the hash data type
  - productID
  - productName
  - productPrice
  - productQuantity
  - productOwner
    - A user ID

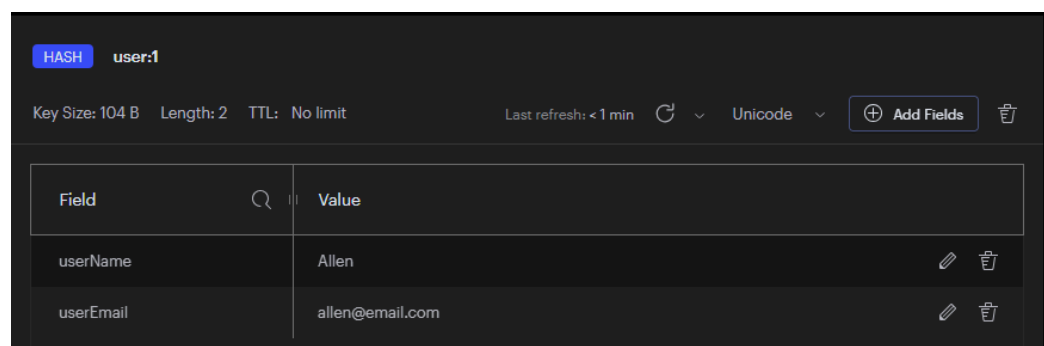


HASH product:4

Key Size: 168 B Length: 5 TTL: No limit Last refresh: < 1 min Unicode Add Fields

Field	Value
productID	4
productName	water bottle
productPrice	20.3
productQuantity	39
productOwner	4

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- Users: (in Redis is “user: {insert user ID}”, also using the hash data type
  - userName
  - userEmail

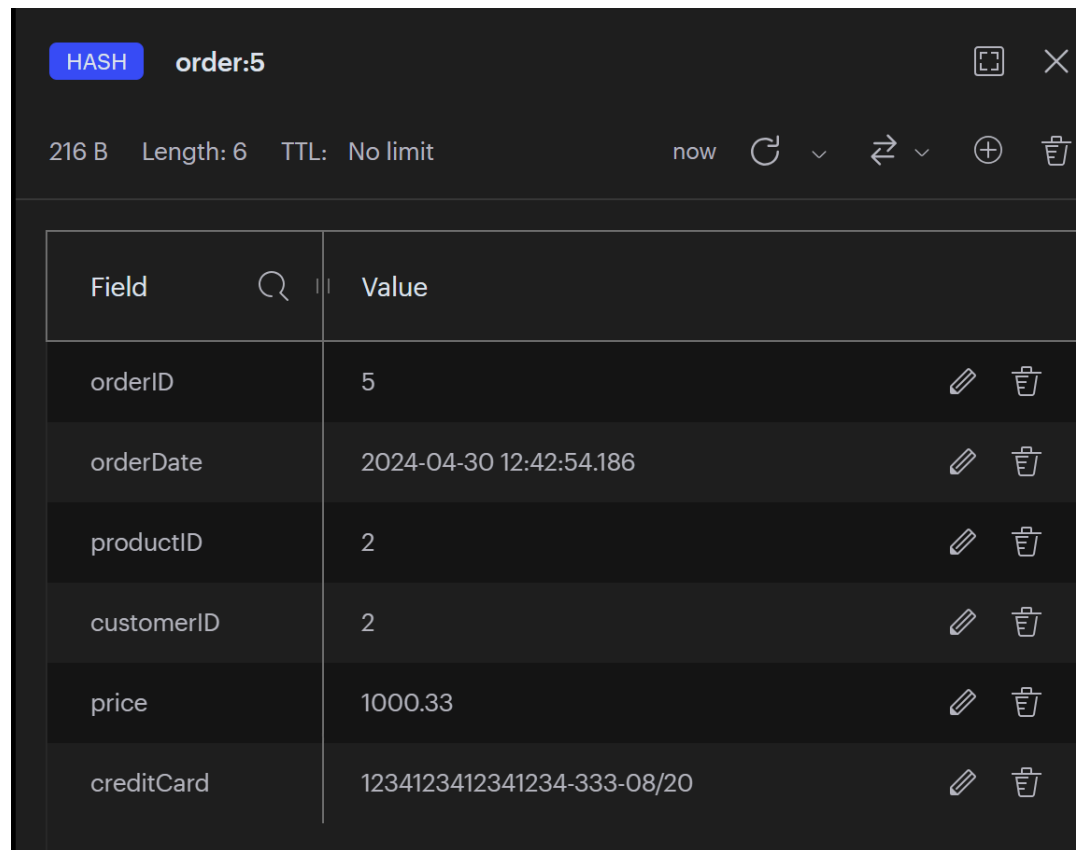


HASH user:1

Key Size: 104 B Length: 2 TTL: No limit Last refresh: < 1 min Unicode Add Fields

Field	Value
userName	Allen
userEmail	allen@email.com

- Orders (in Redis is “order: {insert order ID}”, also using hash data type
  - orderID
    - Since we can only order one product at a time
  - productID
  - customerID
  - price
    - Price of the ordered product
  - Order Date
  - Credit Card
    - Will be formatted: number - cvc - exp date



The screenshot shows a Redis Hash data structure named 'order:5'. The hash contains six fields: orderID, orderDate, productID, customerID, price, and creditCard. Each field has a corresponding value and edit/delete icons.

Field	Value
orderID	5
orderDate	2024-04-30 12:42:54.186
productID	2
customerID	2
price	1000.33
creditCard	1234123412341234-333-08/20

Each user can only buy one item at a time, this will immediately update the quantity of the product as well as add a new order to the database. Users can add, delete, read, and update products for sale.

