

Mini Project Week 5

CSV is great, but there is a better option. Let's store our couriers and products in a database, we'll leave orders as they are for now.

An order's courier and product items properties currently use indexes to reference these entities, we're going to change this to use ids instead.

Remember to update unit-tests.

Goals

As a user I want to:

- create a product or courier and add it to a database table
- create an order and add the order dictionary to a list
- view all products, couriers, or orders
- update the status of an order
- persist my data
- *STRETCH* update or delete a product, order, or courier
- *BONUS* list orders by status or courier
- *BONUS* track my product inventory
- *BONUS* import/export my entities in CSV format

Spec

- A row in the `products` table should contain the following information:

```
{
  "id": 4,
  "name": "Coke Zero",
  "price": 0.8
}
```

- A row in the `couriers` table should contain the following information:

```
{
  "id": 2,
  "name": "Bob",
  "phone": "0789887889"
}
```

- An `order` should be a `dict`, i.e:

```
{
  "customer_name": "John",
  "customer_address": "Unit 2, 12 Main Street, LONDON, WH1 2ER",
  "customer_phone": "0789887334",
  "courier": 2, // Courier ID
  "status": "preparing",
  "items": "1, 3, 4" // Product IDs
}
```

- Orders should be persisted to a `.csv` file on a new line for each `order`, ie:

```
# ORDER
John,"Unit 2, 12 Main Street, LONDON, WH1 2ER",2,preparing,"1,3,4"
```

Pseudo Code

```
# we are no longer reading products and couriers from files
# we are now reading product and courier data from database tables

LOAD orders from orders.csv
CREATE order status list

PRINT main menu options
GET user input for main menu option

IF user input is 0:
    SAVE orders to order.csv
    EXIT app

# products menu
ELSE IF user input is 1:
    PRINT product menu options
    GET user input for product menu option

    IF user inputs 0:
        RETURN to main menu

# WEEK 5 UPDATE
ELSE IF user input is 1:
    GET all products from products table
    PRINT products

# WEEK 5 UPDATE
ELSE IF user input is 2:
    # CREATE new product

    GET user input for product name
    GET user input for product price
    INSERT product into products table

# WEEK 5 UPDATE
ELSE IF user input is 3:
    # STRETCH GOAL - UPDATE existing product

    GET all products from products table
    PRINT products with their IDs
    GET user input for product ID

    GET user input for product name
```

```
GET user input for product price
```

```
IF any inputs are empty, do not update them
```

```
UPDATE properties for product in product table
```

```
# WEEK 5 UPDATE
```

```
ELSE IF user input is 4:
```

```
    # STRETCH GOAL - DELETE product
```

```
    GET all products from products table
```

```
    PRINT products with their IDs
```

```
    GET user input for product ID
```

```
    DELETE product in products table
```

```
# couriers menu
```

```
ELSE IF user input is 2:
```

```
    PRINT courier menu options
```

```
    GET user input for courier menu option
```

```
    IF user inputs 0:
```

```
        RETURN to main menu
```

```
# WEEK 5 UPDATE
```

```
ELIF user inputs 1:
```

```
    GET all couriers from couriers table
```

```
    PRINT couriers
```

```
# WEEK 5 UPDATE
```

```
ELSE IF user input is 2:
```

```
    # CREATE new courier
```

```
    GET user input for courier name
```

```
    GET user input for courier phone number
```

```
    INSERT courier into couriers table
```

```
# WEEK 5 UPDATE
```

```
ELSE IF user input is 3:
```

```
    # STRETCH GOAL - UPDATE existing courier
```

```
    GET all couriers from couriers table
```

```
    PRINT couriers with their IDs
```

```
    GET user input for courier ID
```

```
    GET user input for courier name
```

```
    GET user input for courier phone number
```

```
    IF an input is empty, do not update its respective table property
```

```
    UPDATE properties for courier in courier table
```

```
# WEEK 5 UPDATE
```

```
ELSE IF user input is 4:  
    # STRETCH GOAL - DELETE courier
```

```
    GET all couriers from couriers table  
    PRINT courier with their IDs
```

```
    GET user input for courier ID  
    DELETE courier in couriers table
```

```
# orders menu
```

```
ELSE IF user input is 3:  
    PRINT order menu options  
    GET user input for order menu option
```

```
IF user input is 0:  
    RETURN to main menu
```

```
ELSE IF user input is 1:  
    PRINT orders dictionary
```

```
ELSE IF user input is 2:  
    GET user input for customer name  
    GET user input for customer address  
    GET user input for customer phone number  
  
    # WEEK 5 UPDATE  
    GET all products from products table  
    PRINT products  
    GET user inputs for comma-separated list of product IDs  
    CONVERT above user input to a string e.g. "2,1,3"
```

```
    # WEEK 5 UPDATE  
    GET all couriers from couriers table  
    PRINT couriers  
    GET user input for courier ID
```

```
    SET order status to be 'PREPARING'
```

```
    CREATE new order dictionary with above properties  
    APPEND order to orders list
```

```
ELSE IF user input is 3:  
    # UPDATE existing order status
```

```
    PRINT orders list with its index values  
    GET user input for order index value
```

```
    PRINT order status list with index values  
    GET user input for order status index value  
    UPDATE status for order
```

```
ELSE IF user input is 4:
    # STRETCH - UPDATE existing order

    PRINT orders list with its index values
    GET user input for order index value

    FOR EACH key-value pair in selected order dictionary:
        GET user input for updated property
        IF user input is blank:
            do not update this property
        ELSE:
            update the property value with user input

ELSE IF user input is 5:
    # STRETCH GOAL - DELETE order

    PRINT orders list
    GET user input for order index value
    DELETE order at index in order list
```