**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": "Main Street, LONDON",

        "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,"Main Street, LONDON",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