Bug Log for API Tests

# Overview

All bugs identified come from the testing completed in Postman on the APIS in the API document: <https://qacandidatetest.ensek.io/>.

# Test Data

From running the /ENSEK/energy endpoint and inspecting the results, we find that the energy prices are set as follows:

{

    "electric": {

        "energy\_id": 3,

        "price\_per\_unit": 0.47,

        "quantity\_of\_units": 4322,

        "unit\_type": "kWh"

    },

    "gas": {

        "energy\_id": 1,

        "price\_per\_unit": 0.34,

        "quantity\_of\_units": 3000,

        "unit\_type": "m³"

    },

    "nuclear": {

        "energy\_id": 2,

        "price\_per\_unit": 0.56,

        "quantity\_of\_units": 0,

        "unit\_type": "MW"

    },

    "oil": {

        "energy\_id": 4,

        "price\_per\_unit": 0.5,

        "quantity\_of\_units": 20,

        "unit\_type": "Litres"

    }

}

These are used to test the messages returned from the /ENSEK/buy/{id}/{quantity} endpoint.

# Bug A1:

*Summary:* Oil fuel type cost is incorrect when placing an order

*API Request:* PUT https://qacandidatetest.ensek.io/ENSEK/buy/4/3

*Data used:* Fuel type is Oil, Id 3, quantity is 3 units (Litres)

*Expected Result:* Message returned informing consumer that 3 Litres were purchased at a cost of 3 \* 0.5 per Litre = 1.5 and there are 17 units remaining. The order id is also included.

*Actual Result:* The cost returned from the endpoint is actually 1.79999999.

{

    "message": "You have purchased 3 Litres at a cost of 1.7999999999999998 there are 17 units remaining. Your orderid is bc68dc5a-fa14-42ea-a420-3fe7777e8abd."

}

# Bug A2:

*Summary:* Gas fuel type units bought and remaining are reversed when placing an order

*API Request:* PUThttps://qacandidatetest.ensek.io/ENSEK/buy/1/300

*Data used:* Fuel type is Gas, Id 1, quantity is 300 units (m3)

*Expected Result:* Message returned informing consumer that 300 m3 were purchased at a cost of 300 \* 0.34 per m3 = 102.00 and there are 2700 units remaining. The order id is also included.

*Actual Result:* The units purchased returned from the endpoint is actually 2700 and the units remaining is 300.

{

    "message": "You have purchased 2700 m³ at a cost of 102.00000000000001 there are 300 units remaining. Your order id is 504cb197-a2d2-4560-b193-2f4b42052623."

}