Endpoint function: Authenticate user with username and password

Endpoint: /user/authenticate/default (Not final)

python function: sql_related.authenticate_default(database, data)

- database = main database object (db)
- data = JSON data directly from HTTP request

```
HTTP Request Type: POST
JSON Request Format:
         "authenticate_default":
                  "username": <user username (String)>,
                  "password": <user password (String)>
}
JSON Response Format (successful login):
         "authenticate_default_response":
                  "id": <user database id (int)>,
                  "name_first": <user first name (String)>,
                  "name_last": <user last name (String)>,
                  "sys_username": <user username (String)>,
                  "email_google": <user google email (String)>,
                  "email_fb": <user facebook email (String)>,
                  "phone_number": <user phone number (String / null)>,
                  "sys_user_role":
                  {
                          "id": <user role database id (int)>,
                          "name": <user role name (String)>
                  }
         }
}
```

JSON Response Format (failed login):

Endpoint function: Authenticate user with email via Google / Facebook

Endpoint:

- /user/authenticate/google (google authentication) (Not final)
- /user/authenticate/facebook (facebook authentication) (Not final)

python function: sql_related.authenticate_email(database, data, google)

- database = main database object (db)
- data = JSON data directly from HTTP request
- google = boolean, true if google login, false if fb login

```
HTTP Request Type: POST
JSON Request Format:
         "authenticate_email":
                 "email": <email>
}
JSON Response Format (successful login):
         "authenticate_email_response":
                 "id": <user database id (int)>,
                 "name_first": <user first name (String)>,
                 "name_last": <user last name (String)>,
                 "sys_username": <user username (String)>,
                 "email_google": <user google email (String)>,
                 "email_fb": <user facebook email (String)>,
                 "phone_number": <user phone number (String / null)>,
                 "sys_user_role":
                 {
```

Endpoint function: Request all company_products

Endpoint:

• /company_product/request/all (Not final)

python function: sql_related.request_company_product(database)

• database = main database object (db)

]

Endpoint function: Request all shop_orders that need to be delivered

Endpoint:

• /shop/request/not_delivered (Not final)

python function: sql_related.request_shop_order_not_delivered(database)

• database = main database object (db)

},

```
"zones":
                  {
                            "id": <zone database id (int)>,
                            "name": <zone name (String)>
                  },
                  ... (Additional zones, same format)
         ],
         "street": <shop street (String)>,
         "city": "<shop city(String)>,
         "providence": <shop providence (String)>,
         "zip_4": <shop zip+4 code (String)>
},
"price_due": <order price (Float)>,
"price_paid": <order was paid (Boolean)>,
"date_ordered": <order placed date (String)>,
"date_delivered_projected": <order expected date (String)>,
"date_delivered": null,
"order_taker":
{
         "id": <user database id (int)>,
         "name_first": <user first name (String)>,
         "name_last": <user last name (String)>,
         "sys_username": <user username (String)>,
         "email_google": <user google email (String)>,
         "email_fb": <user facebook email (String)>,
         "phone_number": <user phone number (String / null)>,
         "sys_user_role":
                  "id": <user role database id (int)>,
                  "name": <user role name (String)>
         }
},
"order_fulfiller": null,
"completed": false
"shop_order_items":
                  company_product:
```

```
"id": coduct database id (int)>,
                                                 "company":
                                                         "id": <company database id (int)>,
                                                         "name": <company name (String)>,
                                                         "zones":
                                                         [
                                                                 {
                                                                         "id": <zone database id
                                                                                  (int)>.
                                                                          "name": <zone name
                                                                                  (String)>
                                                                 },
                                                                  ... (Additional zones, same
                                                                         format)
                                                         ]
                                                 },
                                                 "name": cproduct name (String)>,
                                                 "price_buy": c
                                                         (Float)>,
                                                 "price_sell": color sell price (Float)>,
                                                         "units_per_price": <amount of units
                                                                 per price_buy/sell (int)>,
                                                 single unit (Float)>,
                                                 "description": cription (String)>
                                         },
                                         quantity_units: <units of company product ordered (int)>
                                },
                                ... (Additional order items)
                        ]
                },
                ... (Additional shops, same format)
        ]
}
```

Endpoint function: Request all shops

Endpoint:

• /shop/request/all (Not final)

python function: sql_related.request_shop(database)

database = main database object (db)

```
HTTP Request Type: GET
JSON Response Format:
         "request_shop_response":
                  {
                           "id": <shop database id (int)>,
                           "name": <shop name (String)>,
                           "email": <shop name (String / null)>,
                           "phone_number": <shop phone number (String / null)>,
                           "category": (may be null)
                           {
                                    "id": <shop category database id (int)>,
                                    "type": <shop category type (String)>
                           },
                           "zones":
                           [
                                             "id": <zone database id (int)>,
                                             "name": <zone name (String)>
                                    ... (Additional zones, same format)
                           ],
                           "street": <shop street (String)>,
                           "city": "<shop city(String)>,
                           "providence": <shop providence (String)>,
                           "zip_4": <shop zip+4 code (String)>
                  },
                  ... (Additional shops, same format)
         ]
}
```

Endpoint function: Request all zones

Endpoint:

• /zone/request/all (Not final)

```
python function: sql_related.request_zone(database)
                database = main database object (db)
        HTTP Request Type: GET
       JSON Response Format:
                "request_zone_response":
                                "id": <zone database id (int)>,
                                "name": <zone name (String)>
                        },
                        ... (Additional zones, same format)
                ]
        }
Endpoint function: Request all shop_categories
        Endpoint:
               /shop_category/request/all (Not final)
        python function: sql_related.request_shop_category(database)
                database = main database object (db)
        HTTP Request Type: GET
       JSON Response Format:
                "request_shop_category_response":
                        {
                                "id": <shop category database id (int)>,
                                "type": <shop category type (String)>
                        },
                        ... (Additional shop categories, same format)
                ]
```

Endpoint function: Create a new shop

Endpoint: /shop/create (Not final)

python function: sql_related.create_shop(database, data)

- database = main database object (db)
- data = JSON data directly from HTTP request

HTTP Request Type: POST

```
JSON Request Format:
         "create_shop":
                  "name": <shop name (String)>,
                  "email": <shop email (String / null)>,
                  "phone_number": <shop phone number(String / null)>,
                  "category": <shop category id (int)>,
                  "zones":
                  [
                           {
                                    "id": <zone id (int)>
                           },
                           ... (Additional zones, same format)
                  ],
                  "street": <shop street (String)>,
                  "city": <shop city (String)>,
                  "providence": <shop providence (String)>,
                  "zip_4": <shop zip+4 code (String)>
         }
}
JSON Response Format:
{
         "create_shop_response":
                  "id": <shop database id (int)>,
```

```
"name": <shop name (String)>,
                  "email": <shop name (String / null)>,
                  "phone_number": <shop phone number (String / null)>,
                  "category": (may be null)
                           "id": <shop category database id (int)>,
                           "type": <shop category type (String)>
                  },
                  "zones":
                  [
                                     "id": <zone database id (int)>,
                                     "name": <zone name (String)>
                           },
                           ... (Additional zones, same format)
                  ],
                  "street": <shop street (String)>,
                  "city": "<shop city(String)>,
                  "providence": <shop providence (String)>,
                  "zip_4": <shop zip+4 code (String)>
}
```

Endpoint function: Create a new zone

Endpoint: /zone/create (Not final)

python function: sql_related.create_zone(database, data)

- database = main database object (db)
- data = JSON data directly from HTTP request

HTTP Request Type: POST

```
JSON Response Format:
{
    "create_zone_response":
    {
        "id": <zone database id (int)>,
        "name": <zone name (String)>
    }
}
```

Endpoint function: Create a shop_category

Endpoint: /shop_category/create (Not final)

python function: sql_related.create_shop_category(database, data)

- database = main database object (db)
- data = JSON data directly from HTTP request

HTTP Request Type: POST

```
JSON Request Format:
{
        "create_shop_category":
        {
             "type": <shop category type (String)>
        }
}

JSON Response Format:
{
        "create_shop_category_response":
        {
             "id": <shop category database id (int)>,
             "type": <shop category type (String)>
        }
}
```

Endpoint function: Create a shop_order

Endpoint: /shop_order/create (Not final)

python function: sql_related.create_shop_order(database, data)

- database = main database object (db)
- data = JSON data directly from HTTP request

```
HTTP Request Type: POST
```

```
JSON Request Format:
         "create_shop_order":
                  "shop_id": <shop database id (int)>,
                  "price_paid": <if price was paid at time of ordering (Boolean)>,
                  "order_taker_id": <order taker user database id (int)>,
                  "order_items":
                  [
                           {
                                     "id": <company product database id (int)>,
                                     "quantity_units": <quantity of item ordered (int)>
                           },
                           ... (Additional order items, same format)
                  ]
         }
}
JSON Response Format:
         "create_shop_response":
                  "id": <order database id (int)>,
                  "shop":
                  {
                           "id": <shop database id (int)>,
                           "name": <shop name (String)>,
                           "email": <shop name (String / null)>,
                           "phone_number": <shop phone number (String / null)>,
                           "category": (may be null)
                           {
                                    "id": <shop category database id (int)>,
```

```
"type": <shop category type (String)>
         },
         "zones":
         [
                            "id": <zone database id (int)>,
                            "name": <zone name (String)>
                  },
                  ... (Additional zones, same format)
         ],
         "street": <shop street (String)>,
         "city": "<shop city(String)>,
         "providence": <shop providence (String)>,
         "zip_4": <shop zip+4 code (String)>
},
"price_due": <order price (Float)>,
"price_paid": <order was paid (Boolean)>,
"date_ordered": <order placed date (String)>,
"date_delivered_projected": <order expected date (String)>,
"date_delivered": null,
"order_taker":
         "id": <user database id (int)>,
         "name_first": <user first name (String)>,
         "name_last": <user last name (String)>,
         "sys_username": <user username (String)>,
         "email_google": <user google email (String)>,
         "email_fb": <user facebook email (String)>,
         "phone_number": <user phone number (String / null)>,
         "sys_user_role":
         {
                  "id": <user role database id (int)>,
                  "name": <user role name (String)>
         }
},
"order_fulfiller": null,
"completed": false
"shop_order_items":
         {
```

```
company_product:
                                             "id": coduct database id (int)>,
                                             "company":
                                                      "id": <company database id (int)>,
                                                      "name": <company name (String)>,
                                                      "zones":
                                                                        "id": <zone database id (int)>,
                                                                         "name": <zone name (String)>
                                                               },
                                                                ... (Additional zones, same format)
                                                      ]
                                             },
                                             "name": cyroduct name (String)>,
                                             "price_buy": cproduct purchase price (Float)>,
                                             "price_sell": product sell price (Float)>,
                                             "units_per_price": <amount of units per price_buy/sell (int)>,
                                             "price_sell_per_unit": oduct sell price per single unit
                                                      (Float)>,
                                             "description": cription (String)>
                                    },
                                    quantity_units: <units of company product ordered (int)>
                           },
                           ... (Additional order items)
                  ]
         }
}
```

Endpoint function: Update a shop_order as delivered

Endpoint: /shop_order/update/delivered (Not final)

python function: sql_related.update_shop_order_delivered(database, data)

- database = main database object (db)
- data = JSON data directly from HTTP request

HTTP Request Type: POST