# **Project API**

For purposes of this API description, all URLs are relative to the base url of http://localhost:8080/delectable

Also, all data is in JSON format. A GET request will return JSON. A PUT or POST will submit a JSON document.

To keep things simple, no authentication is required to access any resource.

- Menu
- Order
- Customer
- Report
- Admin

## Menu

- GET /menu
- GET /menu/{mid}

### **GET** /menu

Returns an array of all menu items in the menu.

HTTP response code: 200 (OK).

### **Resource URL**

/menu

#### **Parameters**

None.

### **Example Request**

```
GET http://localhost:8080/delectable/menu
```

```
"name": "vegetarian"
}]
}, {
    "id": 124,
    "name": "Buffalo Wings",
    "price_per_person": 1.75,
    "minimum_order": 12,
    "categories": []
}]
```

## ^Top^ ^Menu^

## **GET /menu/{mid}**

Returns a detailed description of the menu item identified by {mid}.

HTTP response code: 200 (OK), 404 (Not Found) if {mid} not found or invalid.

### **Resource URL**

/menu/{mid}

#### **Parameters**

None.

## **Example Request**

```
GET http://localhost:8080/delectable/menu/123
```

### **Example Response**

### ^Top^ ^Menu^

## **Order**

- GET /order
- <u>GET /order[?date=YYYYMMDD]</u>
- PUT /order
- GET /order/{oid}
- POST /order/cancel/{oid}

### **GET** /order

Returns an array of all orders.

HTTP response code: 200 (OK).

### **Resource URL**

/order

#### **Parameters**

None.

### **Example Request**

```
GET http://localhost:8080/delectable/order
```

### **Example Response**

```
[{
      "id": 456,
      "order_date": "20160229",
      "delivery_date": "20160301",
      "amount": 61.92,
      "surcharge": 0,
      "status": "open",
      "ordered_by": "virgil@example.com"
}, {
      "id": 463,
      "order date": "20160229",
      "delivery_date": "20160302",
      "amount": 63,
      "surcharge": 0,
      "status": "cancelled",
      "ordered_by": "bob@example.com"
}]
```

### ^Top^ ^Order^

### GET /order?date=YYYYMMDD

Returns an array of all orders that need to be delivered on YYYYMMDD.

HTTP response code: 200 (OK).

### Resource URL

/order?date=YYYYMMDD

### **Parameters**

None.

## **Example Request**

```
GET http://localhost:8080/delectable/order?date=20160301
```

### **Example Response**

```
[{
        "id": 456,
        "order_date": "20160229",
        "delivery_date": "20160301",
        "amount": 61.92,
        "surcharge": 0,
        "status": "open",
        "ordered_by": "virgil@example.com"
}]
```

### ^Top^ ^Order^

### PUT /order

Creates an order and returns the ID of that order {oid}.

HTTP response codes: 201 (Created), 'Location' header with link to /order/{oid}. The body of the response will contain the order id, and the URL needed to cancel the order.

#### Resource URL

/order

#### **Parameters**

```
delivery date (required): date when order needs to be delivered.
```

delivery address (required): address where order needs to be delivered.

personal info (required): personal information for the person who places the order.

note (required): can be empty.

order detail (required): a non-empty array of menu items.

### **Example Request**

PUT http://localhost:8080/delectable/order

Here is data being PUT

```
{
     "delivery date": "20160301",
     "delivery_address": "10 West 31st ST, Chicago IL 60616",
     "personal info": {
             "name": "Virgil B",
             "email": "virgil@example.com",
             "phone": "312-456-7890"
     "order_detail": [{
             "id": 123,
             "count": 8
     }, {
             "id": 124,
             "count": 24
     }]
}
```

## **Example Response**

```
{
    "id": 456,
    "cancel_url": "/order/cancel/456"
}
```

### ^Top^ ^Order^

## **GET /order/{oid}**

Returns the detail for the order identified by {oid}.

HTTP response code: 200 (OK) or 404 (Not Found) if the order {oid} doesn't exist.

### **Resource URL**

/order/{oid}

### **Parameters**

None.

## **Example Request**

```
GET http://localhost:8080/delectable/order/456
```

### **Example Response**

```
{
      "id": 456,
      "amount": 61.92,
      "surcharge": 0,
      "status": "open"
      "order_date": "20160229",
      "delivery_date": "20160301",
      "ordered_by": {
               "name": "Virgil B",
"email": "virgil@example.com",
               "phone": "312-456-7890"
      },
"delivery_address": "10 West 31st ST, Chicago IL 60616",
      "note": "Room SB-214",
      "order_detail": [{
               "id": 123,
               "name": "Lasagna",
               "count": 8
      }, {
               "id": 124,
               "name": "Buffalo Wings",
               "count": 24
      }]
}
```

### ^Top^ ^Order^

## POST /order/cancel/{oid}

Cancels the order identified by {oid}.

HTTP response codes: 204 (No Content), 'Location' header with link to /order/{oid}. The body of the response will be empty.

### **Resource URL**

/order/cancel/{oid}

#### **Parameters**

id (required): the ID of the order being cancelled.

## **Example Request**

```
POST http://localhost:8080/delectable/order/cancel/456
```

Here is data being POST-ed

```
{
    "id": 456
}
```

### ^Top^ ^Order^

## Customer

- GET /customer
- GET /customer[?key=query string]
- GET /customer/{cid}

### **GET** /customer

Returns an array of all customers that have placed an order in the system.

HTTP response code: 200 (OK).

### **Resource URL**

/customer

#### **Parameters**

None.

## **Example Request**

```
GET http://localhost:8080/delectable/customer
```

### **Example Response**

```
[{
      "id": 701,
      "name": "Virgil B",
      "email": "virgil@example.com",
      "phone": "312-456-7890"
}, {
      "id": 713,
      "name": "Bob Sample",
      "email": "bob@example.com",
      "phone": "312-456-7098"
}]
```

### <u>^Top^</u> <u>^Customer^</u>

## **GET /customer?key=query\_string**

Returns an array of all customers that have placed an order in the system and match the query string. An empty array

will be returned if no customer matches the query string.

HTTP response code: 200 (OK).

#### **Resource URL**

/customer

### **Parameters**

key (optional): query string (aka keyword) used for search, if none specified, then everything matches.

## **Example Request**

```
GET http://localhost:8080/delectable/customer?key=sample
```

## **Example Response**

```
[{
     "id": 713,
     "name": "Bob Sample",
     "email": "bob@example.com",
     "phone": "312-456-7098"
}]
```

### ^Top^ ^Customer^

## **GET** /customer/{cid}

Returns details about customer identified by {cid}, including an array of all orders by that customer.

HTTP response code: 200 (OK) or 404 (Not Found) if customer {cid} doesn't exist.

#### **Resource URL**

/customer/{cid}

#### **Parameters**

None.

### **Example Request**

```
GET http://localhost:8080/delectable/customer/701
```

```
"id": 701,
    "name": "Virgil B",
    "email": "virgil@example.com",
    "phone": "312-456-7890",
    "orders": [{
        "id": 456,
        "order_date": "20160229",
        "delivery_date": "20160301",
        "amount": 61.92,
        "surcharge": 0,
        "status": "open"
}]
```

## ^Top^ ^Customer^

## Report

- GET /report
- GET /report/{rid}[?start\_date=YYYYMMDD&end\_date=YYYYMMDD]

## **GET** /report

Returns an array of report IDs with their corresponding names.

HTTP response code: 200 (OK).

#### **Resource URL**

/report

### **Parameters**

None.

### **Example Request**

```
GET http://localhost:8080/delectable/report
```

```
[{
        "id": 801,
        "name": "Orders to deliver today"
}, {
        "id": 802,
        "name": "Orders to deliver tomorrow"
}, {
        "id": 803,
```

```
"name": "Revenue report"
}, {
    "id": 804,
    "name": "Orders delivery report"
}]
```

## ^Top^ ^Report^

## GET /report/{rid}[?start\_date=YYYYMMDD&end\_date=YYYYMMDD]

Returns the report identified by {rid}. If a start\_date and end\_date are provided, then use those to narrow the result set.

HTTP response code: 200 (OK) or 404 (Not Found) if {rid} is invalid.

### **Resource URL**

/report/{rid}

#### **Parameters**

start\_date (optional): the start date for the date range of the report.

end\_date (optional): the end date for the date range of the report.

## **Example Request**

```
GET http://localhost:8080/delectable/report/801
```

```
{
      "id": 801,
      "name": "Orders to deliver today",
      "orders": [{
              "id": 456,
              "amount": 61.92,
              "surcharge": 0,
              "status": "open",
              "order_date": "20160229",
               "delivery date": "20160301",
              "ordered_by": {
                       "name": "Virgil B",
                       "email": "virgil@example.com",
                       "phone": "312-456-7890"
              },
"delivery_address": "10 West 31st ST, Chicago IL 60616",
              "note": "Room SB-214",
               "order detail": [{
                       "id": 123,
                       "name": "Lasagna",
                       "count": 8
              }, {
                       "id": 124,
                       "name": "Buffalo Wings",
```

```
"count": 24
                }]
      }, {
                "id": 459,
                "amount": 128.90,
                "status": "open",
                "surcharge": 0,
"order_date": "20160228",
                "delivery_date": "20160301",
                "ordered_by": {
                         "name": "John Doe",
                         "email": "john.doe@example.com", "phone": "123-456-7890"
                },
"delivery_address": "123 Main ST, Chicago IL 60617",
                "note": "We need chopsticks",
                "order_detail": [{
                         "id": 127,
                         "name": "Chicken fried rice",
                         "count": 32
                }]
      }]
}
```

## **Another Example Request**

GET http://localhost:8080/delectable/report/803?start\_date=20160101&end\_date=20160331

### **Example Response**

```
{
    "id": 803,
    "name": "Revenue report",
    "start_date": "20160101",
    "end_date": "20160331",
    "orders_placed": 47,
    "orders_cancelled": 2,
    "orders_open": 45,
    "food_revenue": 513.98,
    "surcharge_revenue": 15
}
```

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## **Admin**

- PUT /admin/menu
- POST /admin/menu/{mid}
- GET /admin/surcharge
- POST /admin/surcharge
- POST /admin/delivery/{oid}

### PUT /admin/menu

Creates a new menu item entry in the menu.

HTTP response codes: 201 (Created), 'Location' header with link to /menu/account/{mid} where {mid} is the newly assigned ID for the menu item.

#### Resource URL

/admin/menu

### **Parameters**

name (required): the name of the menu item.

price per person (required): the price of this menu item per person.

minimum order (required): minimum number of orders of this menu item.

categories (required): an array of categories the menu item belongs to, e.g. "organic", "vegan", etc.

## **Example Request**

```
POST http://localhost:8080/delectable/admin/menu
```

Here is data being PUT

## **Example Response**

```
{
   "id": 123
}
```

### ^Top^ ^Admin^

## POST /admin/menu/{mid}

Modifies the price for the menu item identified by {mid}.

HTTP response codes: 204 (No Content), 400 (Bad Request) if data is missing from the request or is malformed. 'Location' header with link to /menu/{mid}. The body of the response will be empty.

### **Resource URL**

/admin/menu/{mid}

### **Parameters**

id (required): the ID of the menu item that's being changed.

price per person (required): the price of this menu item per person.

## **Example Request**

```
POST http://localhost:8080/delectable/admin/menu/123
```

Here is data being POST-ed

```
{
    "id": 123,
    "price_per_person": 3.99
}
```

## ^Top^ ^Admin^

## **GET** /admin/surcharge

Returns an the current value of the surcharge.

HTTP response code: 200 (OK).

#### **Resource URL**

/menu

### **Parameters**

None.

## **Example Request**

```
GET http://localhost:8080/delectable/admin/surcharge
```

### ^Top^ ^Menu^

## POST /admin/surcharge

Modifies the surcharge amount.

HTTP response codes: 204 (No Content), 400 (Bad Request) if data is missing from the request or is malformed. 'Location' header with link to /admin/surcharge. The body of the response will be empty.

#### **Resource URL**

/admin/surcharge

#### **Parameters**

surcharge (required): the new surcharge amount.

### **Example Request**

```
POST http://localhost:8080/delectable/admin/surcharge
```

Here is data being POST-ed

```
{
    "surcharge": 5.00
}
```

### ^Top^ ^Admin^

## POST /admin/delivery/{oid}

Modifies the status of order {oid} to "delivered".

HTTP response codes: 204 (No Content), 404 (Not Found) if {oid} not found or invalid. 'Location' header with link to /order/{oid}. The body of the response will be empty.

#### Resource URL

/admin/delivery/{oid}

#### **Parameters**

id (required): the id of the order being updated.

## **Example Request**

POST http://localhost:8080/delectable/admin/delivery/456

Here is data being POST-ed

```
{
    "id": 456
}
```

## ^Top^ ^Admin^

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Id: project-api.html, v 1.6 2016/04/07 02:39:15 virgil Exp