

# iOS Programming Assignment

The goal of this assignment is to assess your iOS API knowledge and general programming style. You should be able to accomplish it in a few hours. It is not necessary to handle all edge cases; however, please indicate in comments any work which would still be remaining to “productize” the implementation.

The assignment is to create a small app that does the following:

1. A list of products is retrieved from a REST endpoint
2. A View Controller presents the products in a grid (2 columns), items are roughly square shaped (see image 1)
3. Clicking on a product leads to another View Controller, showing this product’s details
4. The details of the clicked product are retrieved from a REST endpoint as well based on a url which is derivable from the data in the product list response.

Key requirements:

1. For bonus points please implement using the Swift programming language.
2. Please use a Storyboard in your implementation
3. When displaying the product detail view, please ensure the view works well in both portrait and landscape orientations.

## Rough UI of the final app

1. Each product tile should show the following information:
  - a. an image
  - b. the name
  - c. the price

## REST information

You can obtain the list of products from the following REST endpoint:

- <https://s3-eu-west-1.amazonaws.com/developer-application-test/cart/list>

**method:** GET

**parameters:** none

A product can be obtained from the following endpoint:

- [https://s3-eu-west-1.amazonaws.com/developer-application-test/cart/{product\\_id}/detail](https://s3-eu-west-1.amazonaws.com/developer-application-test/cart/{product_id}/detail)

**method:** GET

**parameters:** product\_id

Image 1

<div>image</div> <div>Product name price</div>	<div>image</div> <div>Product name price</div>
<div>image</div> <div>Product name price</div>	<div>image</div> <div>Product name price</div>
<div>image</div> <div>Product name price</div>	<div>image</div> <div>Product name price</div>
<div>image</div> <div>Product name price</div>	<div>image</div> <div>Product name price</div>

## Appendix:

### Product List:

URL: <https://s3-eu-west-1.amazonaws.com/developer-application-test/cart>

Note: Price is displayed in cents, thus 120 represents €1,20

Sample response:

```
{
  "products" : [
    {
      "product_id" : "1"
      "name" : "Apples",
      "price" : 120,
      "image" : "https://s3-eu-west-1.amazonaws.com/developer-application-test/images/1.jpg"
    }
  ]
}
```

### Product Details:

URL: [https://s3-eu-west-1.amazonaws.com/developer-application-test/cart/{product\\_id}/detail](https://s3-eu-west-1.amazonaws.com/developer-application-test/cart/{product_id}/detail)

Note: The url contains "{product\_id}" this should be replaced by the product\_id of the product you are looking up, for example <https://s3-eu-west-1.amazonaws.com/developer-application-test/cart/1/detail>

Sample Response:

```
{
  "product_id" : "1",
  "name" : "Apples",
  "price" : 120,
  "image" : "https://s3-eu-west-1.amazonaws.com/developer-application-test/images/1.jpg",
  "description" : "This is a text block which should be displayed and can be very long."
}
```