

Homework 1

Q1: TypeScript syntax (check [tutorial](#) if needed)

1) Define a Typescript class for representing students with three attributes: firstname, lastname, admissionYear;

implement a member function **time2graduate()**, which calculate how many years a student will graduate based on his/her admission year and 4 years of college study.

2) Create an array called studentList, store 5 student objects to studentList array using push function.

You can pick any values for the sample student names or admission years (ranging from 2014 to 2019)

3) Use a for loop to print out the number of years to graduate for students in the year. Your output should look like below:

John Howard will graduate in 3 years

Mary Lee will graduate in 2 years

Q2: Typescripts concepts

- (1) Give an example of Typescript object, and class instance object and tell their difference.
- (2) Define a product interface which has two attributes: name and price
- (3) Create an array with 10 numbers, and then use three different way to add them up
 - for(j in nums) {
 - for(var i = 0;i<nums.length;i++) {
 - for(x in nums) {

Q3: Create an ionic store app named **GamecockStore** with the following 5 UI pages and functions

There are 2 tabs, and 5 pages to implement.

ProductListPage (used for first tab)

OrderListPage (used for second tab)

ProductDetailPage (show when u click product item in product list page)

AddProductPage (show when u click add button on product list page)

OrderDetailPage (show when u click the orders on orderlist page)

So create an angular skeleton app with tabs option

and generate 5 pages with above page names (don't need to include "Page" in page generation command)

Requirement of each page UI and function design:

- a) first tab shows a list of products, each product should show the product name, price, category and image; You need to define an array with 5 default product information in Service module. this works together with the ProductListPage. (just need to set ProductListPage to tab1)
- b) the second tab shows a list of user's orders. It will show orderID, how many items it contains, total price, and order date. For both these two tabs, when users click the item, it should show an item (product or order) detail page to display item details. You need to define an array with 5 default orders information in Service module. this works together with the OrderListPage. (just need to set OrderListPage to tab1)
- c) AddProduct page:

For the ProductListPage page, implement an Add(+) button on the top right corner, when clicked, it allows the store owner to add new product to the store. The following information should be able to be input by user from this page.

product name
product Price
product Category, select one from [toy, food, drink]
product photo url
product description

- d) In the product detail page, it shows the product info, and has a slide control on the top allowing you specify how many you want to order with default to 1. implement an order button on the top right.
- e) In the order detail page, it should show orderID, how many items it contains, total price, and order date.

For each of the 5 pages, you need to define the UI, and implement the basic functions as specified above. (Note: no need to implement the add order function in this assignment. Just use default fixed orders that you specify by code).

HOW TO SUBMIT:

Upload the two project files to <http://dropbox.cse.sc.edu>

You can refer to this app for reference in terms of page design.

<https://www.sellmyapp.com/downloads/food-ninja-online-food-ordering-app/>

