FULL STACK DEV ASSIGNMENT

Overview

This assignment is for potential Full Stack Developer candidates for Spotzer Media Group B.V. The purpose of this assignment is to assess your development and coding skills on a real world example.

Please complete this assignment to the best of your ability. Your assignment can be created in any programming language/ environment that you see fit. We also expect to see some unit tests for code you write and this is your chance to show us your design decisions and your awesome skills!

The Assignment

Company X produce digital marketing products like websites and paid search campaigns to their channel partners customers. Company X has 4 partners that want to send orders to them via API.

We need you to develop a rest API for Company X's partners, so that they can send orders into Company X to fulfill. However each partner has slight differences in their order structure and some have more information than others to pass.

You need to design the API method so that there is a single method to accept these orders from all the partners. It's also worth thinking about how extensible your design is, as Company X want to push all their partners into using the API to submit orders.

On the next page, there are JSON examples of the basic order and products. Below are the additional rules for each partner.

Partner A sells the website product only and collects the following additional fields about their customers:

"ContactFirstName", "ContactLastName", "ContactTitle", "ContactPhone", "ContactMobile", "ContactEmail"

Partner B uses the standard order fields and sells both website and paid search products.

Partner C sells both products, and collects the additional information below

 "ExposureID", "UDAC", "RelatedOrder"

Partner D sells the paid search product only.

There are bonus points for Error Handling logic and Comments/Swagger.

Good luck!

Order JSON Example (with both products)

```
{  "Partner": "sample string 1",
   "OrderID": "sample string 7",
   "TypeOfOrder": "sample string 8",
   "SubmittedBy": "sample string 11",
   "CompanyID": "sample string 28",
   "CompanyName": "sample string 29",
   "LineItems": [
     {
       "ID": 1,
       "ProductID": "sample string 17",
       "ProductType": "sample string 18",
       "Notes": "sample string 53",
       "Category": "sample string 245",
       "WebsiteDetails": {
         "TemplateId": "sample string 245",
         "WebsiteBusinessName": "sample string 245",
         "WebsiteAddressLine1": "sample string 246",
         "WebsiteAddressLine2": "sample string 247",
         "WebsiteCity": "sample string 248",
         "WebsiteState": "sample string 249",
         "WebsitePostCode": "sample string 250",
         "WebsitePhone": "sample string 257",
         "WebsiteEmail": "sample string 258",
         "WebsiteMobile": "sample string 259"
       }
     },
     {
       "ID": 1,
       "ProductID": "6789",
       "ProductType": "Paid Search",
       "Notes": "sample string 53",
       "Category": "sample string 245",
       "AdWordCampaign": {
         "CampaignName": "sample string 1",
         "CampaignAddressLine1": "sample string 2",
         "CampaignPostCode": "sample string 6",
         "CampaignRadius": "sample string 13",
         "LeadPhoneNumber": "sample string 14",
         "SMSPhoneNumber": "sample string 15",
         "UniqueSellingPoint1": "sample string 18",
         "UniqueSellingPoint2": "sample string 19",
         "UniqueSellingPoint3": "sample string 20",
         "Offer": "sample string 21",
         "DestinationURL": "sample string 23"
       }
     }
   ]
}
```

The **Website** product is composed of the following properties (JSON example):

```
{
 "ID": 1,
 "ProductID": "12 7",
 "ProductType": "Website",
 "Notes": "sample string 53",
 "Category": "sample string 245",
 "WebsiteDetails": {
  "TemplateId": "sample string 245",
  "WebsiteBusinessName": "sample string 245",
  "WebsiteAddressLine1": "sample string 246",
  "WebsiteAddressLine2": "sample string 247",
  "WebsiteCity": "sample string 248",
  "WebsiteState": "sample string 249",
  "WebsitePostCode": "sample string 250",
  "WebsitePhone": "sample string 257",
  "WebsiteEmail": "sample string 258",
  "WebsiteMobile": "sample string 259"
 }
}
```

The **Paid Search** product is composed of the following properties (JSON example):

```
{
 "ID": 1,
 "ProductID": "6789",
 "ProductType": "Paid Search",
 "Notes": "sample string 53",
 "Category": "sample string 245",
 "AdWordCampaign": {
  "CampaignName": "sample string 1",
  "CampaignAddressLine1": "sample string 2",
  "CampaignPostCode": "sample string 6",
  "CampaignRadius": "sample string 13",
  "LeadPhoneNumber": "sample string 14",
  "SMSPhoneNumber": "sample string 15",
  "UniqueSellingPoint1": "sample string 18",
  "UniqueSellingPoint2": "sample string 19",
  "UniqueSellingPoint3": "sample string 20",
  "Offer": "sample string 21",
  "DestinationURL": "sample string 23"
 }
}
```