S.A. Candidate Technical Assessment v3

**Introduction**

Our intent of this test is to gauge how you approach solving problems from both technical and business perspectives. The test is divided into the following three sections:

1. Front-End Development Challenge

2. Client-Facing Response

3. Product Feed Validation

Details for these sections are provided below.

**Solutions Architect: Front-End Dev Challenge**

**Problem Case**

Your task is to translate the business requirement from a "hypothetical" customer of ours, and create a working version of the experience that the customer is requesting.

**Business Requirement from Customer:**

"*I want to create a front-end experience that would showcase recent photos from my Olapic account. I want the photos to be in a grid layout, as seen here:* https://www.adidas.com/us/cloudfoam-advantage-shoes/AW4294.html?pr=home\_rr&slot=1 " (See area under *Share How You Wear It* )

**Task**

Create a simple front-end display of UGC pulled directly from the Olapic API, and arrange the photos in a grid layout that mimics the Adidas PDP implementation (one large photo, followed by 4 smaller images).

**Conditions**

1. Display the images retrieved from the Olapic API response

2. Explain your development process. (i.e. Your method of retrieving images from the Olapic API, how you achieved the desired layout, etc.) This can be delivered directly in your email, or in the Readme file of your Github repository.

**Olapic API Information**

Our RESTful API documentation can be found here: http://www.photorank.me/api.html. API Key you can use for authentication is: 0a40a13fd9d531110b4d6515ef0d6c529acdb59e81194132356a1b8903790c18

Please provide the code in a Github repository. Your file structure should look something like this, but you're not limited to it:

index.html style.css script.js

**Hint:** You are not limited to using the above file structure, show off your development skills using other advanced frameworks (React, Vue.js) if you are familiar with the technology! If you are not as familiar, you can opt for a simpler library such as jQuery to perform an AJAX call to the web service, and then inject the content from the API into the DOM.

**Tommy La:**

1. I was able to authenticate the API key by going to “<https://photorankapi-a.akamaihd.net/?auth_token=0a40a13fd9d531110b4d6515ef0d6c529acdb59e81194132356a1b8903790c18&version=v2.2>”
2. I reviewed the code and went to the media URL //photorankapi-a.akamaihd.net/customers/215757/media/photorank?auth\_token=0a40a13fd9d531110b4d6515ef0d6c529acdb59e81194132356a1b8903790c18&version=v2.2.
3. I began to pull the first 4 images from the above URL.
4. Then I started to create the folders/files and place them in their respective folders.
5. Afterward, I began to start coding the index.html file and the css file. I was able to create 1 (one) large photo, followed by 4 (four) smaller images.

**Solutions Architect: Client Response Test**

The following is a series of customer questions, most of them coming from real customer interactions. For each question, write a customer-facing response and provide your rationale. For questions that you don't know the answers to, feel free to search for answers online and provide the sources you used. Don't invent facts.

In addition to overall content, we will be looking at your ability to research technical questions, present a professional yet friendly response to customers, and provide a quality response based on limited information.

**Q1 -- Integration Inquiry**

"*Is there an Olapic integration with Demandware? We are in the process of moving to Demandware; if we decided to use Demandware, how* " *would we go about doing that?*

**A1:   
Dear Valued Customer,  
  
Thank you for inquiring your question regarding the integration with Olapic and Demandware. We are excited to inform you that Demandware is one of our partners and I will be able to assist you with the integration. Do you have time this week to go over the details?**

**Sincerely,**

**Tommy La**

**Rationale/Sources:**

[**https://www.channelmarketerreport.com/2013/12/demandware-adds-olapic-true-fit-to-link-partner-program/**](https://www.channelmarketerreport.com/2013/12/demandware-adds-olapic-true-fit-to-link-partner-program/)

[**http://www.olapic.com/abm-demandware/**](http://www.olapic.com/abm-demandware/)

[**http://www.olapic.com/partners/salesforce-commerce-cloud/**](http://www.olapic.com/partners/salesforce-commerce-cloud/)

**Q2 -- Site Performance Issue**

" ". *We are noticing that our page is loading slowly. We have 50 high-resolution images loading in the Olapic carousel and we'd like to speed it up!*

**A2:**

**Dear Sir/Madame,**

**Thank you for reaching out to me regarding your concerns. I understand website speed is very important to consumers and slow performance can cause bounce rates. One great way to speed up your website is utilizing a Content Delivery Network (CDN). There are many free CDN services and one provider that I highly recommend is Cloudflare. Cloudflare has over 165 data centers across the globe and their reliability is impeccable.**

**Furthermore, you may also consider implementing Lazy Loading Image Assets. You may customize the Lazy Loading logic to only load the photos within the user’s viewpoint rather than loading the entire website.**

**Sincerely,**

**Tommy La**

**Rationale/Sources:**

<https://www.cloudflare.com/network/>

<http://developer.olapic.com/articles/widget-load-optimization-guide.html#lazy-loading-image-assets>

**Q3 -- Customization Request**

" " *Unless Olapic JS widgets support IE8, it looks like we may have to take our business elsewhere. What can you do to make this happen?*

Note: Olapic widgets only support IE9+ and modern browsers. Olapic API is often used as an alternative to Olapic JS widgets.

**A3:**

**Dear Valued Customer,**

**Thank you for reaching out to me regarding your concern. We understand Microsoft Internet Explorer is an intricate browser many consumers are utilizing because that is the default browser to all PC computers. However, Olapic widgets only supports Internet Explorer 9+ and modern browsers such as Chrome or Firefox. A great alternative option for Olapic JS widgets is using Olapic API which I can assist you with the integration. Please let me know what day and time works best for you and we can join a call together to go over further details.**

**Sincerely,**

**Tommy La**

**Rationale/Sources:**

<http://developer.olapic.com/>

<http://apiv2-docs.photorank.me/>

**Q4 -- Unhappy Customer**

" " *Our widgets are down! You sent us an email saying our new API key is ready and now we're getting a message saying API key expired!*

Note: Due to a bug on our side, the API key that was generated for them was expired at the time they received it. The new API key is now ready for them to access in their Olapic account.

**A4:**

**Dear Valued Customer,**

**We apologies for the inconvenience this may have caused for you. There was a bug on our system and the API key that was provided to you was an incorrect key. The bug has been fixed and we have generated a new API key for you. Would you kindly confirm the new API key is working well on your end? Again, please accept my sincere apology and thank you for being a loyal customer.**

**Sincerely,**

**Tommy La**

**Rationale/Sources:   
  
It is important to be transparent with customers. We need to let them know there was an error on our side and we have addressed the issue.**

**Solutions Architect: Product Feed Validation**

One aspect of the Olapic integration is for the client's Product Feed to be validated to confirm it can be imported into their Olapic account successfully.

**Task**

Below, in the Appendix, we have provided an initial version of a feed file that has been delivered by a client. The task is to run a validation test on the file in order to

1) identify any errors and

2) propose fixes for those errors to be resolved.

**Note**:

Our validation tool can be found here: http://developer.olapic.com/articles/product-feed-full-public.html#validating-your-feed

**Issues Caught & Suggested Fixes:**

**Tommy La:** There was a total of 6 (six) issues caught in the XML. 5 (five) issues were an extra space when closing an element. 1 (one) error for using the “&” sign, the correct way is using “&nbsp;”

**Appendix**

<?xml version="1.0" encoding="UTF-8"?>

<Feed>

<Categories>

<Category>

<CategoryUniqueID>cat1001</CategoryUniqueID> <Name>Men's</Name>

<CategoryUrl>http://www.myawesomestore.com/categories/mens</CategoryUrl>

</Category> <Category>

<CategoryUniqueID>cat1002</CategoryUniqueID> <Name>T-shirts</Name>

<CategoryUrl>http://www.myawesomestore.com/categories/mens/tshirts</Cate goryUrl>

<CategoryParentID>cat1001</CategoryParentID> </Category> </Categories> <Products>

<Product>

<Name>Awesome Possum T-shirt</Name> <ProductUniqueID>APTS</ProductUniqueID>

<ProductUrl>http://www.myawesomestore.com/products/APTS</ProductUrl>

<ImageUrl>http://www.myawesomestore.com/images/APTS-mainstockimage.jpg</ ImageUrl>

<Description>This is an example description of my Awesome Possum T-shirt</Description>

<CategoryID>cat1002</CategoryID> <UPCs>

<UPC>001-122-334451</UPC> <UPC>001-122-334483</UPC> </UPCs> <Price>23.99</Price> <Stock>15</Stock> <Availability>true</Availability> </Product> <Product>

<Name>Awesome Possum T-shirt Black</Name> <ProductUniqueID>APTS-01</ProductUniqueID>

<ProductUrl>http://www.myawesomestore.com/products/APTS?color=01</Produc tUrl>

<ImageUrl>http://www.myawesomestore.com/images/APTS-black.jpg</ImageUrl>

<Description>This is an example description of my Awesome Possum T-shirt</Description>

<CategoryID>cat1002</CategoryID> <UPCs>

<UPC>001122334451</UPC> <UPC>001122334452</UPC> <UPC>001122334453</UPC> </UPCs> <Price>23.99</Price> <Stock>5</Stock> <Availability>true</Availability>

<Color>Black</Color> <ParentID>APTS</ParentID> </Product> <Product>

<Name>Awesome Possum T-shirt Blue</Name> <ProductUniqueID>APTS-02 Blue</ProductUniqueID>

<ProductUrl>http://www.myawesomestore.com/products/APTS?color=02</Produc tUrl>

<ImageUrl>http://www.myawesomestore.com/images/APTS-black.jpg</ImageUrl>

<Description>This is an example description of my Awesome Possum T-shirt</Description>

<CategoryID>cat1002</CategoryID> <UPCs>

<UPC>001122334461</UPC> <UPC>001122334463</UPC> </UPCs> <Price>23.99</Price> <Stock>5</Stock> <Availability>true</Availability> <Color>Blue</Color> <ParentID>APTS</ParentID> </Product> <Product>

<Name>Awesome Possum T-shirt & Shorts Red</Name> <ProductUniqueID>APTS-03</ProductUniqueID>

<ProductUrl>http://www.myawesomestore.com/products/APTS?color=03</Produc tUrl>

<ImageUrl>http://www.myawesomestore.com/images/APTS-red.jpg</ImageUrl>

<Description>This is an example description of my Awesome Possum T-shirt and Shorts</Description>

<UPCs>

<UPC>001122334471</UPC> <UPC>001122334473</UPC> </UPCs> <Price>23.99</Price> <Stock>5</Stock> <Availability>true</Availability> <Color>Red</Color> <ParentID>APTS</ParentID>

</Product> </Products> </Feed>