



Vanilla JS - Home Assignment

Introduction

The purpose of this test is to evaluate your technical abilities in frontend design and development and to allow common grounds for discussion during the test.

You are encouraged to use any resource at your disposal online. You will be asked to explain your solution in the interview, emphasizing on design and coding decisions. We expect a working product. The solution is expected to be designed to allow extensions in the future.

Main Objective

Your job is to **design and implement** a recommendation widget using the Taboola REST API (described below). You will need to invoke our API in order to receive recommendations and then display the recommendations in a recommendation widget that you've designed. The recommendation widget should be fully functional and should open selected recommendations.

There are two types of the recommendations: organic and sponsored. The organic recommendations are additional articles from the hosting site. Such recommendations include the article thumbnail and a caption. The article is opened in the same tab when clicked. The sponsored recommendations are brought by various advertisers. They include the article thumbnail, the caption and the source of the recommendation (the advertiser name). The article is opened in a new tab when clicked.

You are expected to create the widget using only client side code. The API should be invoked using Javascript and the widget should be rendered in the client side using a combination of HTML, JS and CSS.

Note: Try to support as many browsers as you can. Not all browsers API are supported for all browsers.

Design Restrictions/Guidelines

- Running code, not including tests, should be written in Vanilla Javascript, **without** any libraries or frameworks.
- Design should be responsive (desktop / mobile)
- The code needs to be covered by Unit Tests. You can use [Jest](#) or any other library.
- You should supply instructions for running your project

Think about the usability and design of the widget, in a way that would produce the optimal performance for the recommendation widget while still being sensible in your decisions (remember we render on other

peoples' websites).

Please design your code in a way that allows adding more types of recommendations in the future. For example: in addition to the sponsored and organic recommendations, we might want to show video inside the widget.

In **Appendix** you can see a couple of examples of how some of our widgets are placed and implemented in several publishers' sites. These examples are for reference, and **aren't a requirement** for designing the widgets.

How to use the Taboola REST API?

Note: This API needs USA VPN to get responses.

The API is fairly simple - send a GET request, receive a JSON response.

In this test you will be using a publisher that only receives "sponsored" content items, meaning this publisher wants to only place a widget that has outbound links.

The parameters needed in order to invoke the API for this test are:

Key	Value
<i>publisher id</i>	taboola-templates
<i>app.type</i>	desktop
<i>app.apikey</i>	f9040ab1b9c802857aa783c469d0e0ff7e7366e4
<i>source.id</i>	You can use a constant string, as it's only a demo

For example, here's a request for recommendations and the response received. For the following request:

<http://api.taboola.com/1.0/json/taboola-templates/recommendations.get?app.type=desktop&app.apikey=f9040ab1b9c802857aa783c469d0e0ff7e7366e4&count=4&source.type=video&source.id=214321562187&source.url=http://www.site.com/videos/214321562187.html>

The response will look like this:

```
"id": "__8d844dd416a776ff07ffbfd357a73a28__37258eb909112010bde9bc8cb355a545__",
"list": [
  {
    "description": "10万円リゾートから100万円マンションまで\u2026粗大ゴミ化する負動産",
    "type": "video",
    "name": "10万円リゾートから100万円マンションまで\u2026粗大ゴミ化する負動産（神田敏晶） - Yahoo!ニュース",
    "created": "Wed, 04 Feb 2015 21:46:45 UTC",
    "branding": "Byline",
    "duration": "0",
    "views": "0",
    "thumbnail": [
      {

```

```
        "url": "http://images.taboola.com/taboola/image/fetch/f_jpg,q_aut205-00042811-roupeiro-000-4-view.jpg"
    }
},
"categories": [
    "jp"
],
"id": "~V1~~-2093862212721107661~~fGI2x9luxxy9zfPFiseE7y",
"origin": "sponsored",
"url": "http://api.taboola.com/1.0/json/taboola-templates/recommendations.notify-click?app.type"
},
{
    "description": "Jsou starší, jsou lehce strhanější, ale pořád mají síly nshow.",
    "type": "video",
    "name": "Třetí řada The Grand Tour se blíží. Nabízí se otázka: Bude pro slavné moderátory poslední? - Autoweb.cz",
    "created": "Tue, 04 Dec 2018 13:00:42 UTC",
    "branding": "AutoWeb",
    "duration": "0",
    "views": "0",
    "thumbnail": [
        {
            "url": "http://images.taboola.com/taboola/image/fetch/f_jpg,q_auto,c_fill,g_faces:auto,e_sh.jpg",
            "width": "1366",
            "height": "768"
        }
    ],
    "categories": [
        "cs"
    ],
    "id": "~V1~~-8116559384140964622~~SiBYuwqDKrlgNMDpqRY8i0aldSVl0pyr6_HlDOSlHPk-_ybc02U0",
    "origin": "sponsored",
    "url": "http://api.taboola.com/1.0/json/taboola-templates/recommendations.notify-click?app.type=desAZ2H_5eHMQ"
},
{
    "type": "video",
    "name": "Forge Of Empires",
    "created": "Mon, 04 Feb 2019 14:05:34 UTC",
    "branding": "Forge of Empires",
    "duration": "0",
    "views": "0",
    "thumbnail": [
        {
            "url": "http://images.taboola.com/taboola/image/fetch/f_jpg,q_auto,c_fill,g_faces:auto,e_res_2000x600.jpg",
            "width": "2000",
            "height": "600"
        }
    ],
    "categories": [
        "cs"
    ],
    "id": "~V1~~-783622115126593357~~7vYoMYWzn0WqFMnm5FJSQ4WOrn6D4oltw0D6pdyQZ2MAnsTPHjyPCJlE4JDOSlHPk-_ybc02U0",
    "origin": "sponsored",
    "url": "http://api.taboola.com/1.0/json/taboola-templates/recommendations.notify-click?akey=f9040ab1b9c80285"
},
{
    "description": "先日時計好きの高校からの同期と話をしたところ、Apple Watchについて「必ずしも安いとは思わず、むしろハイエンドモ",
```

```
"type": "video",
"name": "Apple Watchは安すぎる? (松村太郎) - Yahoo!ニュース",
"created": "Wed, 17 Dec 2014 06:46:12 UTC",
"branding": "Byline",
"duration": "0",
"views": "0",
"thumbnail": [
  {
    "url": "http://images.taboola.com/taboola/image/fetch/f_jpg,q_auto,c_fill,g_faces:auto,e_sharpen/http://rpr.c"
  }
],
"categories": [
  "jp"
],
"id": "~~V1~~~959190556378027013~~fGI2x9luxxy9zfPFsdcYKz8s6n8AhGh_xv3sfT0DlFyI7IKSpPQrPrDDjDTd3W",
"origin": "sponsored",
"url": "http://api.taboola.com/1.0/json/taboola-templates/recommendations.notify-click?app.type=desktop&app.apikey"
}
]
```


Appendix

Below you can see a couple of examples of our widgets on various publishers.


MSN (Article Page)

1. Example URL:
<https://www.msn.com/en-us/entertainment/entertainment-celebrity/the-taylor-swift-cleaning-cart-theory-was-just-confirmed-by-a-fan-video-and-i-m-not-okay/ar-AA19siNc>
2. At the bottom of the article you can see the widgets:


MORE FOR YOUPromoted Links by Taboola




Should Optometrists Start Prescribing These 3 Foods Instead of Lenses?
Health News Tips Ebook




This app will have you speaking a new language in 3 weeks!
Babbel




Start playing and you won't sleep for 3 days!
Throne: Free Online Game



Kate Middleton Gives a Glimpse of Her Growing Belly During a Charity Gala
PopSugar on MSN



Diana Ross Poses With Her Kids and Grandkids For Epic Family Photo at American Music...
ETOnline on MSN



See All the Photos from Serena Williams' Perfect Wedding to Alexis Ohanian in New Orleans
People on MSN

USA Today Article Page

Example URL:

<https://www.usatoday.com/story/news/politics/onpolitics/2016/06/20/hillary-clinton-built-big-stockpile-showdown-donald-trump/86161596/>

At the bottom of the article you can see two widgets:

- 2.1. The top one is a Sponsored Content only widget all recommendations are from other websites/providers.
- 2.2. The bottom one is an organic widget. All recommendations are from Billboard.

AD CONTENT by Taboola ▶



That's How You Find Super Cheap Hotels!

Save70



Shaq's Bank Account Will Stun You

PressroomVIP



Aged 35 he speaks 11 languages - his 11 tricks to learn any language

Babbel



8 Tips to Keep Your Liver Healthy

Vitality



7 Uses For Lemons You Never Knew

HealthyPanda.net



How To Create a Gorgeous Website For Free

Wix.com

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SPORTS | 14 hours ago



New poll shows Clinton maintains lead over Trump nationally

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