

Senior Engineer Code Challenge

Include all files (including any development or tooling related files) used to fulfill the feature request below in a single .zip file. Provide a publicly accessible link using Github, Dropbox, Cloudapp, or whatever service your prefer, to your .zip file.

Task:

Create a WordPress Plugin that allows users to add a Product post with a product URL, using the Diffbot Products API.

Feature Request:

We have partnered with an API service that will allow our internal production staff to simply enter a product's URL (from any major e-commerce site), and automatically save the product information to our database. To do this, we will need a custom post type for saving the product data, and a form for our production staff to enter a URL.

Requirements:

- Create a public custom post type named Products
- Add a screen that allows our internal CMS users to query the Diffbot Products API with a URL and create a Product post if the API returns successful results.
 - This screen should include an input field for a URL that upon submit is sent to the Diffbot Products API for a response.
 - If the API response for the URL provided returns successful results, create a Product post using values from the following data fields (when present):
 - "title" = the Product's post title
 - "text" = the Product's post content
 - "offerPrice" = post_meta for the Product post
 - "regularPrice" = post_meta for the Product post
 - "pageUrl" = post_meta for the Product post
 - Display a success message to the user if the new Product was created.
 - Display an error message to the user if there was any reason a new Product was not created.

Assumptions:

- Assume any product being added is unique, as preventing any sort of duplicate entry is outside the scope of this task.
- The "screen" you are adding for the CMS users can be located anywhere as long as it is visible somewhere in the Dashboard. It is up to you to decide where is best.
- Assume any user that has the capability to publish a post can also create a Product.

Diffbot API Information

Sign-up for a free trial to gain access to a token for the Diffbot API at <https://www.diffbot.com/plans/trial>. There is no credit card required, but you do have to use a valid email account. The trial lasts for 14 days and includes 10,000 API requests.

Once you have completed the sign-up process, your API token will be included with your confirmation email. Documentation for the Diffbot Products API is available: <https://www.diffbot.com/dev/docs/product/>

F.A.Q.

How do I know if the API response was a success?

The response code should be *200*, and the response body must contain a "title" key and value in the first resource of the *object* array (ex. *objects[0].title*).

How can I test the Diffbot Products API?

Sample Product API query with a product URL:

```
curl -G http://api.diffbot.com/v3/product \
--data-urlencode "token=xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx" \
--data-urlencode
"url=http://www.bhphotovideo.com/c/product/1081029-REG/sennheiser\_506231\_momentum\_in\_ea\_r\_m2.html"
```

The response: <https://gist.github.com/rachelbaker/0418b7e999fda82d7bd6>

Where are some examples of URLs the CMS users would use to query the Diffbot Products API?

The CMS users would enter a URL for a product we have tested from any ecommerce site. A few examples are:

<http://www.rei.com/product/862474/rei-radiant-sleeping-bag>

<http://www.walgreens.com/store/c/ology-sunscreen-lotion-spf-50/ID=prod6210342-product>

<http://www.target.com/p/tide-original-plus-bleach-alternative-high-efficiency-liquid-laundry-detergent-138-oz/-/A-15071680>

<http://www.logitech.com/en-us/product/bluetooth-illuminated-keyboard-k810>

http://www.bhphotovideo.com/c/product/1076400-REG/sony_ilce_5100l_b_alpha_a5100_mirrorless_digital.html