DOZUKI

Grab Bag Project

Project Description

Build a tool to let users assemble a collection of devices they own. Your application will have a grid of devices and a 'gear bag,' or place for a user to show off their stuff. You'll store the list in the users' browser, using HTML5's storage engine. When the user reloads the page, everything should still be in their gear bag.

Requirements

- It should work in the latest version of Chrome
- It does not need to work in IE
- Implement this entirely client-side, using Javascript, HTML, CSS, and React
- Using our API, retrieve images for all of our devices
- Show these devices as a grid of images
- Note: We have a lot of devices, so they won't all fit on the screen.
- Use infinite scrolling or pagination.
- Don't load them all up-front. Perform additional API requests as the user scrolls or clicks 'next'
- Create a gear bag which is just a list of devices
- Make the devices draggable (Users should be able to drag a device into their virtual collection)
- Store the devices in the gear bag in the browser's HTML5 storage layer
- On page load, check the HTML5 storage layer to see if there are any stored devices to display
- Ensure when the user reloads the page, everything is still in their gear bag
- Extra credit: Make your application work on mobile and tablet screen sizes.

Helpful links

https://developer.mozilla.org/en-US/docs/Web/Guide/API/DOM/Storage

http://www.ifixit.com/api/2.0/doc

https://www.ifixit.com/api/2.0/doc/Wikis#list-wikis

API Usage

Making a List (Device List)

The list of devices should just be a GET on

https://www.ifixit.com/api/2.0/wikis/CATEGORY?offset=0&limit=50

This endpoint flattens our hierarchy. Thus, you can get a list of all devices a little at a time.

Making a Tree (CATEGORY hierarchy)

You can see the entire CATEGORY hierarchy via our API:
https://www.ifixit.com/api/2.0/doc/Content_Hierarchy#list-categories

Devices are a special type of Category: They are the leaf nodes of the CATEGORY Hierarchy. For example, if you are given:

```
{
   "Apparel": {
      "Accessory": {},
      "Clothing": {
         "Bottoms": {
            "Jeans": {},
            "Patagonia Bottoms": {
               "Patagonia Jeans": {}
            }
         }
      }
   }
}
```

Jeans and Patagonia Jeans would be devices in the Category API. While Apparel, Clothing, Bottoms, would be a CATEGORY returned by the Category API.

We have an endpoint that loads more info about a Category:
https://www.ifixit.com/api/2.0/doc/Wikis#get-a-specific-wiki

As well as an endpoint that will load the children of a node:
https://www.ifixit.com/api/2.0/doc/Wikis#get-all-children-of-a-wiki

Note: We use a special Root Category to indicate the first node in the hierarchy. You can access it via
https://www.ifixit.com/api/2.0/wikis/CATEGORY/Root

Tips

The best place to look for examples is in the iFixit GitHub repository (https://github.com/ifixit), where we've open-sourced some of our projects like the embed widget, our iOS app, and our Android app. All of those make good use of (different versions of) our API to retrieve their data. Our API documents also include an example response.

Here is one possible way to implement this project

1. Work on the Grid. Focus on retrieving images, show these devices, and pagination or infinite scrolling.
2. Create the gear bag and make the devices draggable.
3. Store the list of devices in the browser's HTML5 storage layer / check it on page load.

Submitting

Please put the project on GitHub and send a link once you get started. Don't forget to commit and push periodically as you go.

Questions?

If you've got questions, feel free to ask. We're looking forward to seeing what you create!