

Chewy Project Proposal

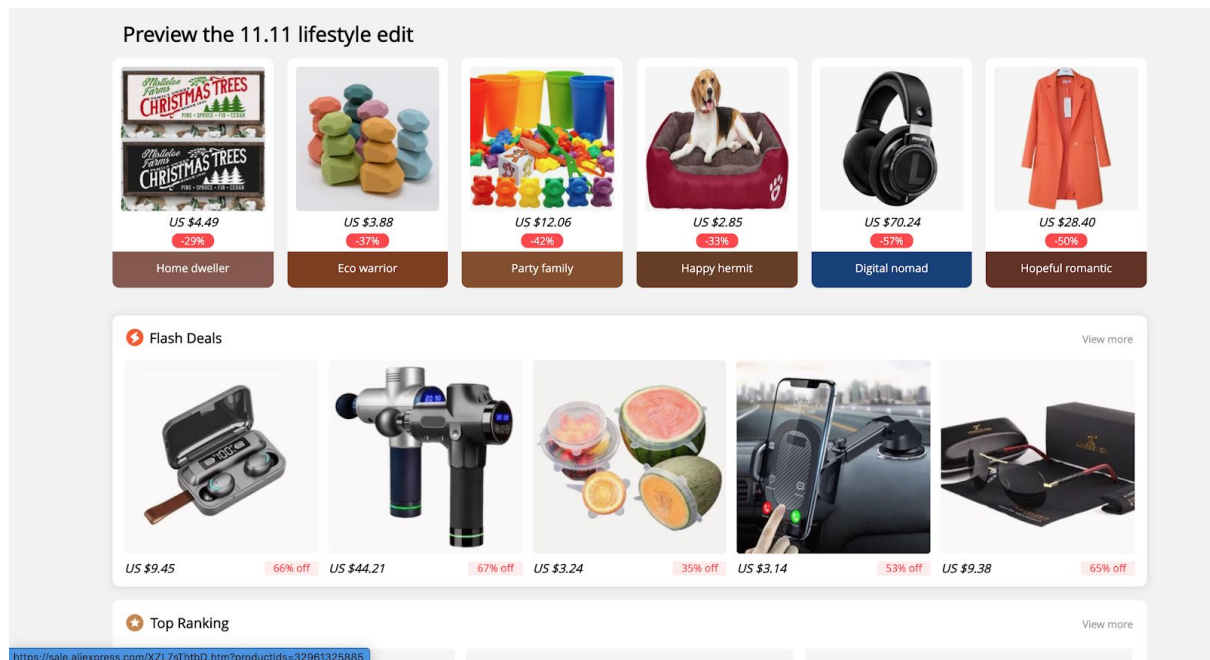
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Description of Chewy

Chewy is a vanilla JS library that allows users with visual impairment or specific display preferences to reshape websites to enhance the viewing experience with the click of a button. The idea arose from watching Youtube, where the user is allowed to switch the video display type, ranging from default mode, Miniplayer mode (i), Cinema Mode mode (t) or Fullscreen mode (f). The letter following each mode represents a keyboard character the user can press to seamlessly switch between viewing modes. Another source of inspiration are from mobile devices that allow users to increase the font size or add bolding. Both subtle features provide different ways to view the same content, catering to a wider audience of users. Chewy follows suit, aiming to increase the ease of use for people with specific needs by reshaping websites, scraping images and enlarging them at the click of a keyboard button.

Let use a generic shopping website as a use case:



Here, the user is presented with a ton of images representing items a user can purchase. A visually impaired user might need to zoom (Control +) onto the image or click on the image to view more details. A minor inconvenience to some users. To make matters worse, the user may click on the item, and be presented with even more tiny and/or convoluted images.

Store Home

Products

Sale Items

Top Selling

Aliexpress Plus


Drop Shipping

Feedback

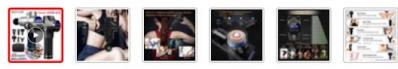
Brand Story

YOSYO®

Over \$49-\$3



FAST DELIVERY



LCD Display Massage Gun Deep Muscle Massager Muscle Pain Body Neck Massage Exercising Relaxation Slimming Shaping Pain Relief

★★★★★ 4.9 5589 Reviews 10593 orders

FLASH DEALS

30 Day Best Price

Limited Time Only

Ends in 03:20:57

US \$44.21 - 47.82

US \$133.98--144.90

-67%

US \$3.00 New User Coupon

Get coupons

Ships From:

Poland

Israel

China

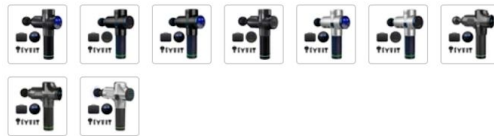
United States

Spain

Russian Federation

France

Color:



Plug Type:

US Plug

EU Plug

UK Plug

AU Plug

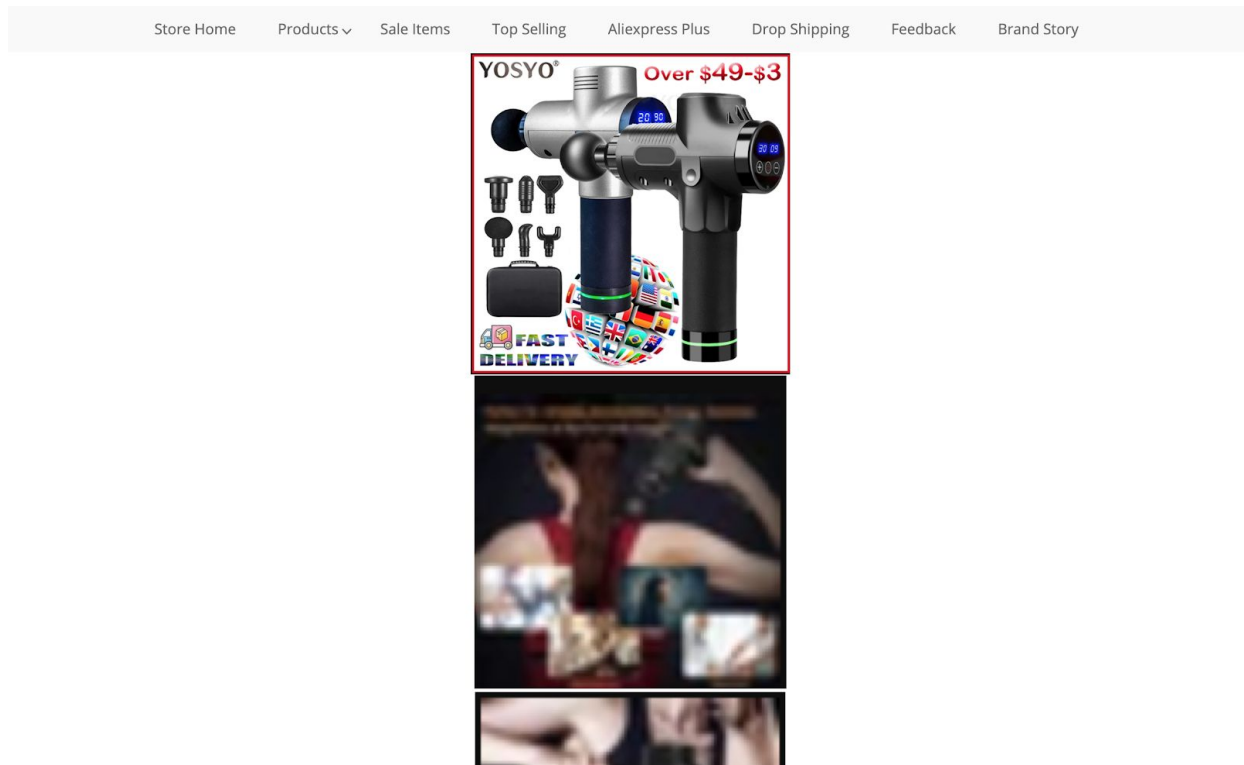
Quantity:

1

Additional 2% off (5 pieces or more)

Another layer of inconvenience.

Like the aforementioned Youtube viewing modes, a user should be able to press a button on their keyboard and have the website automatically reshape the website, presenting enlarged items. For instance, the user can press the 'L' key and the above image would transform into:



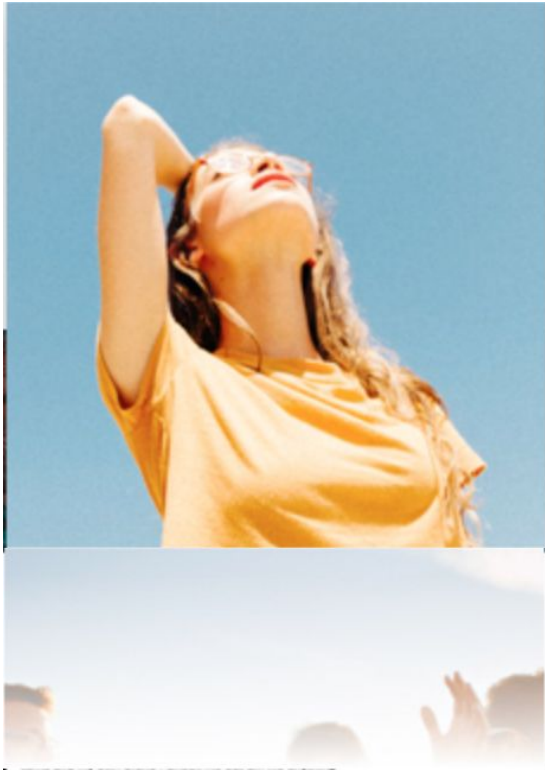
(This image poorly depicts the vision of Chewy because this is a single image, not a scrollable web page where it can demonstrate many enlarged items simultaneously. I am aware the enlarged images are blurry due to pixel stretching. Chewy will utilize some other JS library that fixes this.)

When the user wants to revert the website to its original viewing form, simply pressing the same keyboard button (in this case, the 'L' key) will do so.

Looking at another audience, not the target audience, that Chewy can enhance is Instagram. A typical posting feed on Instagram looks like:

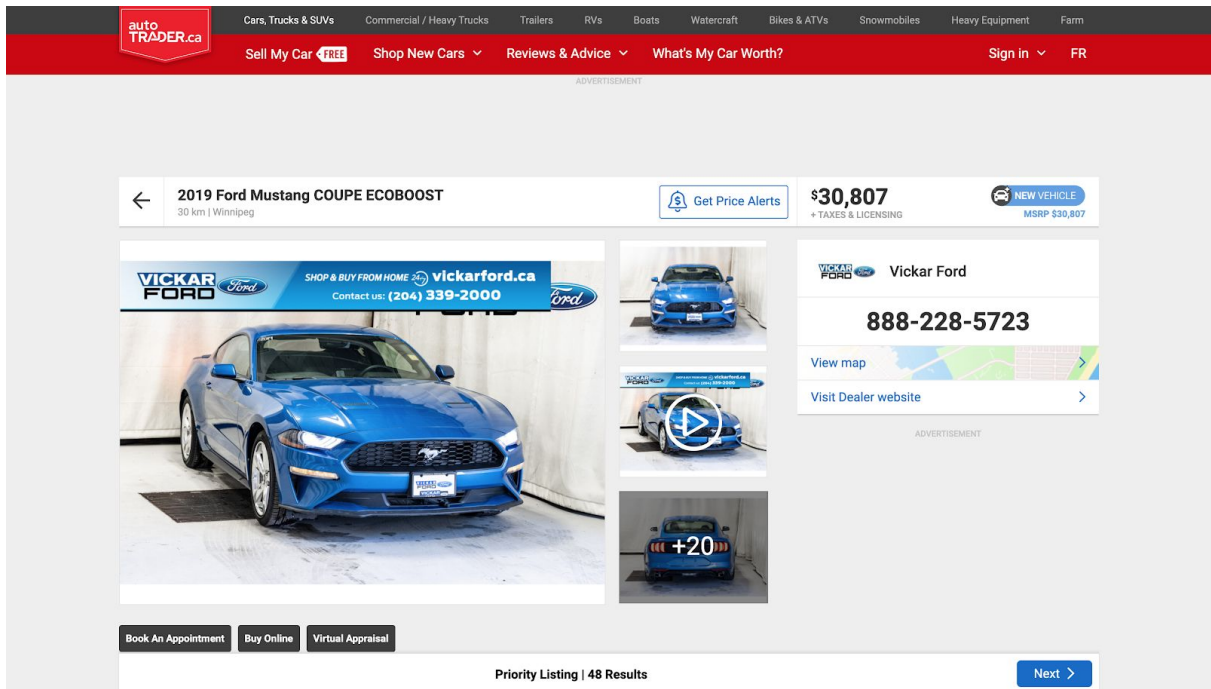


A user like myself, doesn't care about the creator, likes, caption or comments. I specifically opened Instagram to view images and would prefer if all the other elements in the webpage were hidden. Following the same paradigm from the example above, if I hit some keyboard button, say 'L', I should be able to transform the webpage to strictly show me:

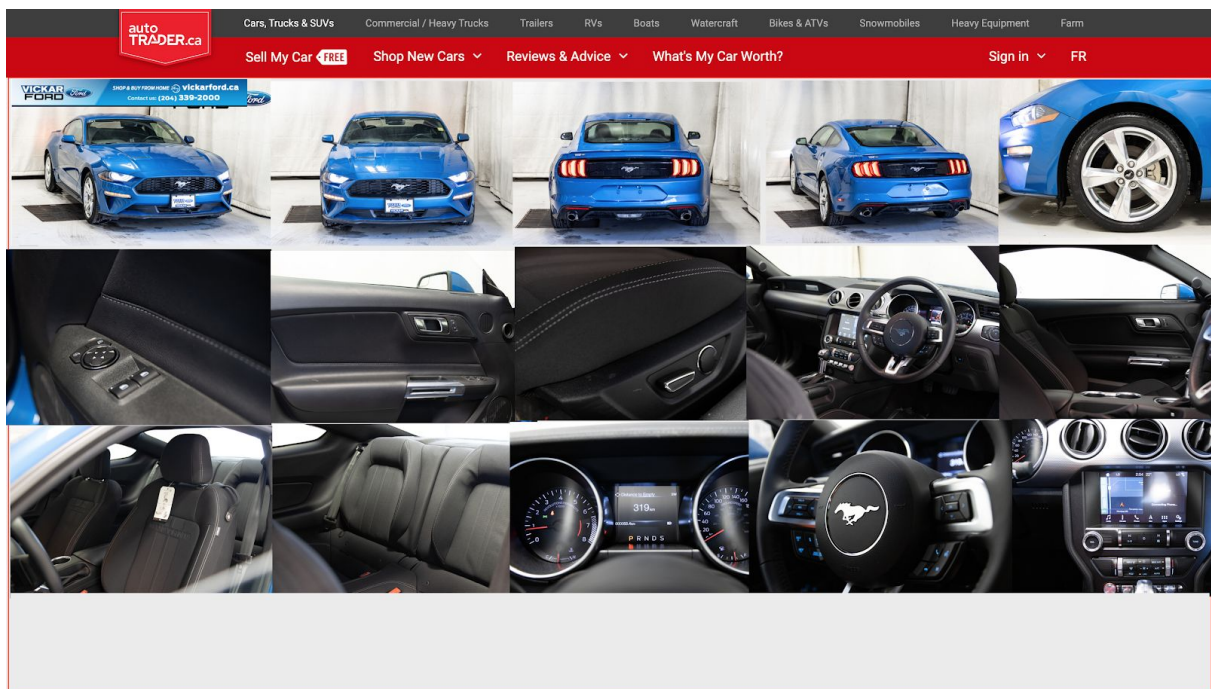


Notice in the two examples above, both have a simple layout, an ordered list of images. This layout might satisfy some users but, everyone has their own stylistic viewing preferences. Chewy can solve that too. Recall, Youtube has multiple viewing modes for watching videos and how the previous examples responded to the keyboard button 'L'. Chewy allows developers to create an infinite amount of image layouts mapped to any keyboard button(s). For example, a developer behind a shopping website can map the keyboard button 'S' to a slideshow viewing mode. When the user presses 'S', the website will automatically collect all images present on the current webpage, enlarge them and display them in a slideshow format.

This is a difficult concept to show in a simple image, because a slide show is just that, an iteration over images. Let's take another example. A user is browsing cars and comes across the page:



Developers might study through analytics that people are too lazy to click on the +20 images and thus, click away from the car. Developers can create different viewing formats to attract the user and keep them exploring on the same page. A developer might tell Chewy, "Make me a 3 by 5 grid layout and map it to the key 'G'". The user will now have the ability to press the key 'G' transforming the page into:



In conclusion, Chewy is a library that a developer could easily plug and play into their projects that would toggle the styling of a page with minimal developer interference. Chewy allows developers to follow the best practices when it comes to accessibility by utilizing formats designed for visual impairment accessibility or to create their own unique viewing formats. Developers who want to reach a larger audience and be more customer friendly without significant amounts of research, work and style refactoring, will make use of Chewy. Chewy manipulates the DOM directly (saving a copy of the previous DOM to allow users to revert back) by injecting layouts into the webpage. Chewy saves developers a lot of time from creating layouts with HTML/CSS or React components, by using the aforementioned formats or by simply telling Chewy what layout the developer desires, such as "Grid 3 5".