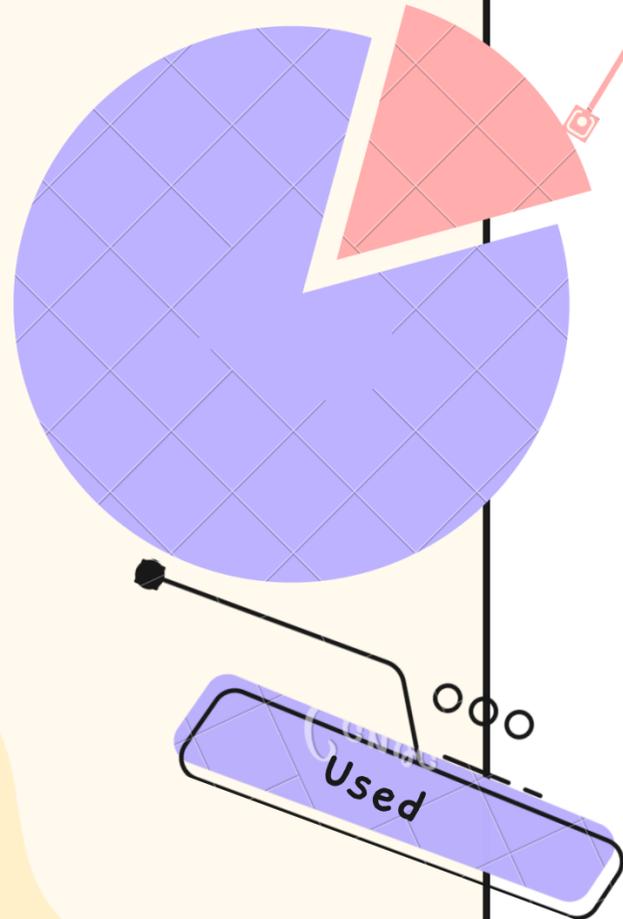


# HOW TO FIND OUT UNUSED CSS & JS?

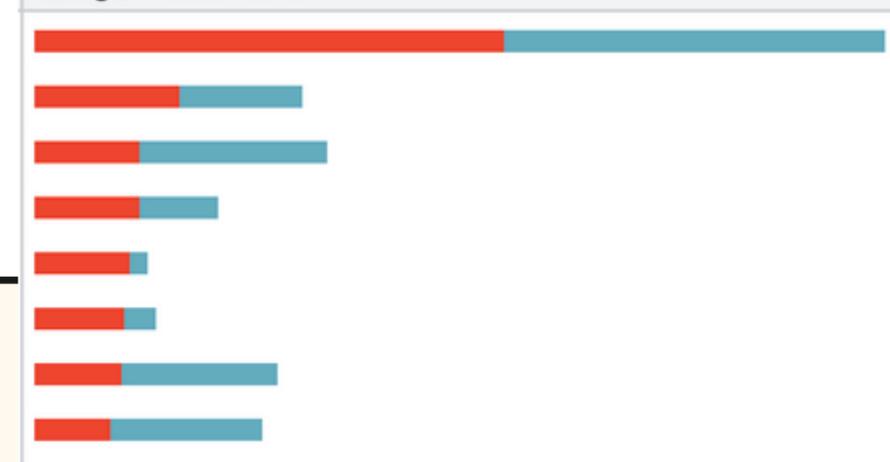
Powered by Google Chrome



Unused

Used

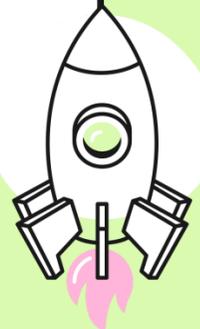
Usage Visualization



# WHY SHOULD YOU CARE ?

## IMPROVED PERFORMANCE

By removing unused resources such as CSS and JS we can reduce the unnecessary overhead of loading and rendering those resources which helps optimize the critical rendering path of a web page resulting in improved performance and faster load times



## REDUCED BANDWIDTH

Every byte of data transferred over the network consumes bandwidth, by eliminating unused resources we can reduce the file size and the number of network requests resulting in lower bandwidth usage which can be a huge benefit for users on slower networks or limited/expensive bandwidth availability



## EASIER/FASTER DEBUGGING

Getting rid of unused code from production makes debugging any prod issue much easier and faster. With fewer lines of code to analyse developers can identify and resolve issues faster resulting in a more stable and reliable application.



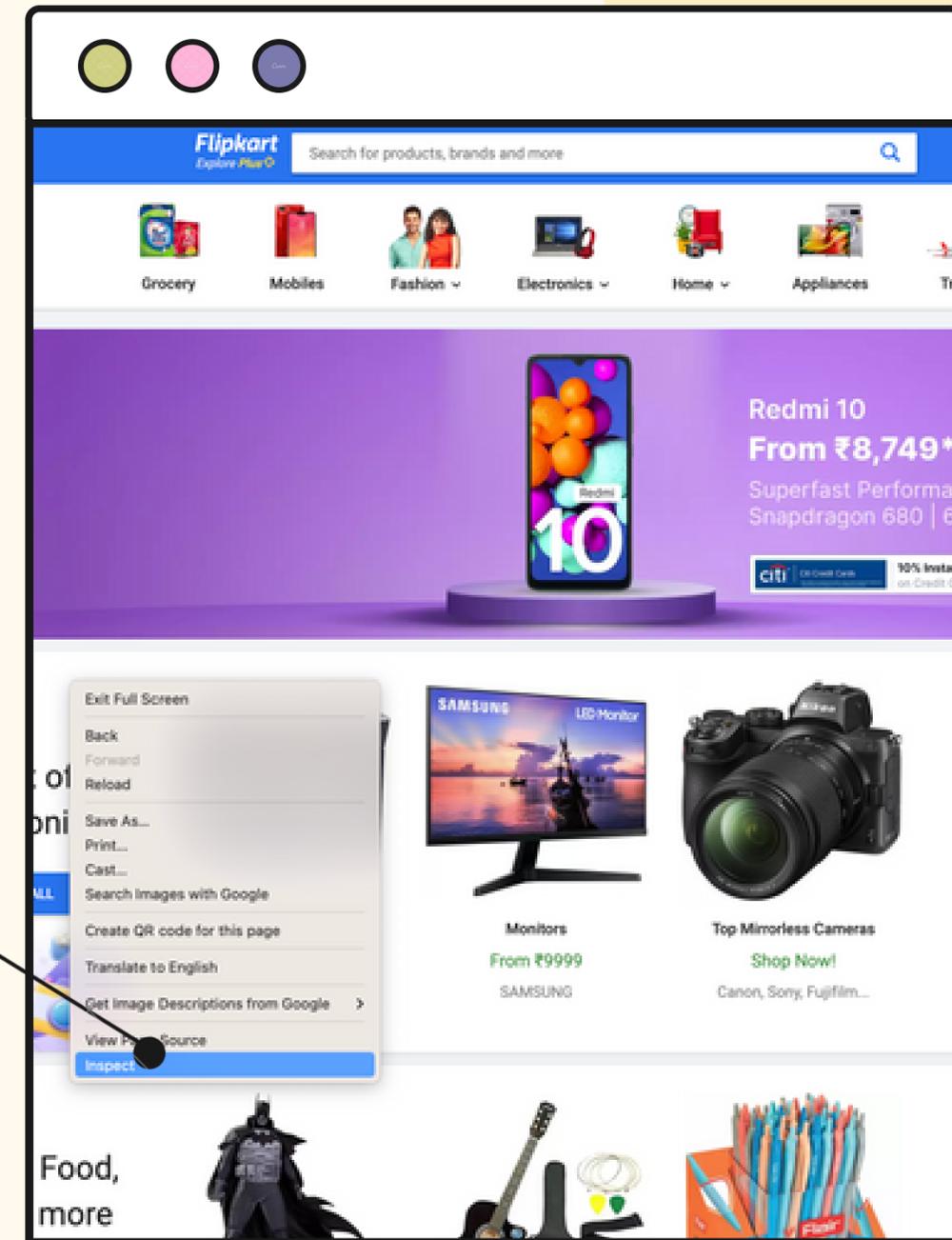
# HOW TO FIND OUT **UNUSED** RESOURCES USING CHROME DEVTOOLS ?

1

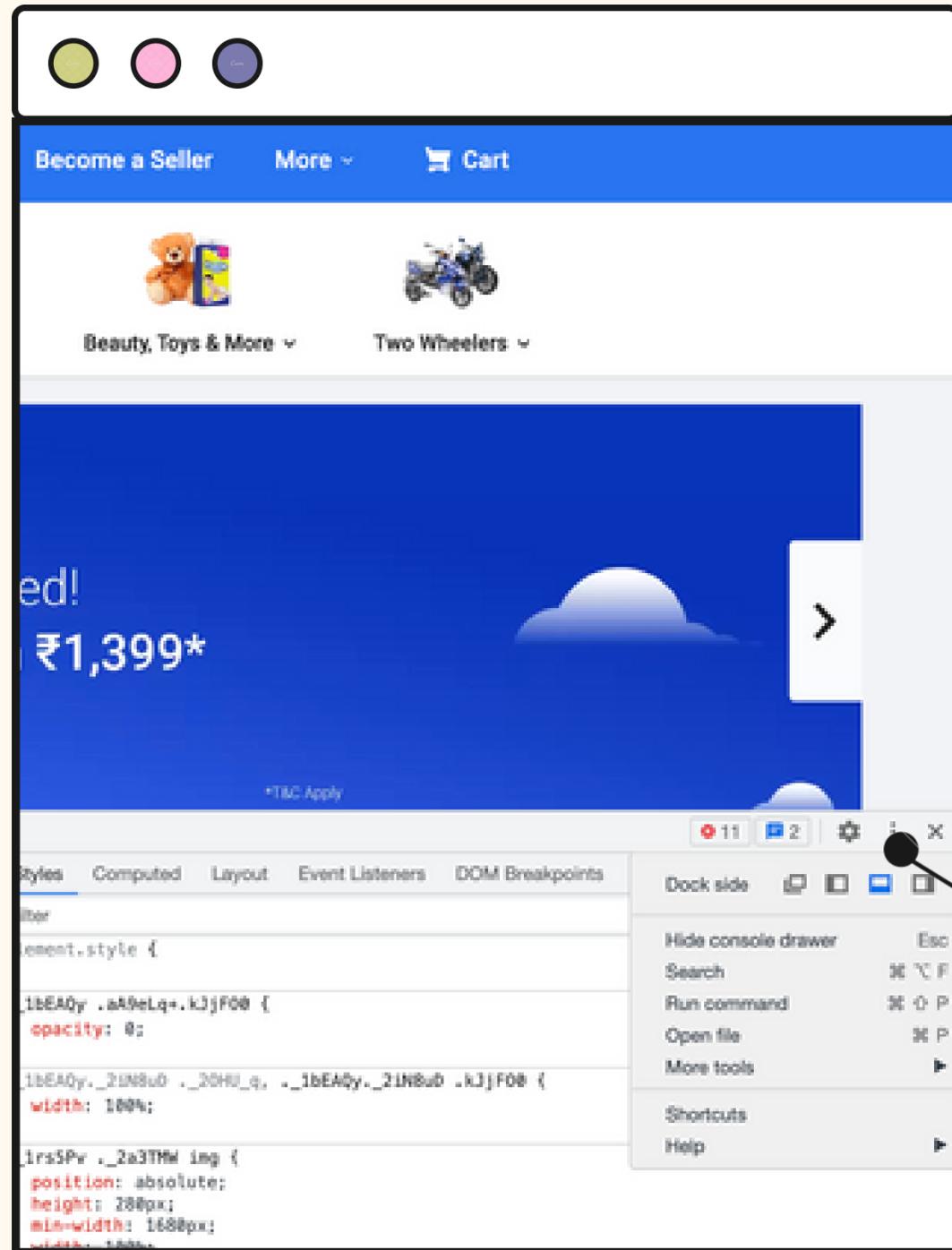
**OPEN CHROME DEVELOPER TOOLS**

1.1

Right-click on the webpage and select "Inspect."





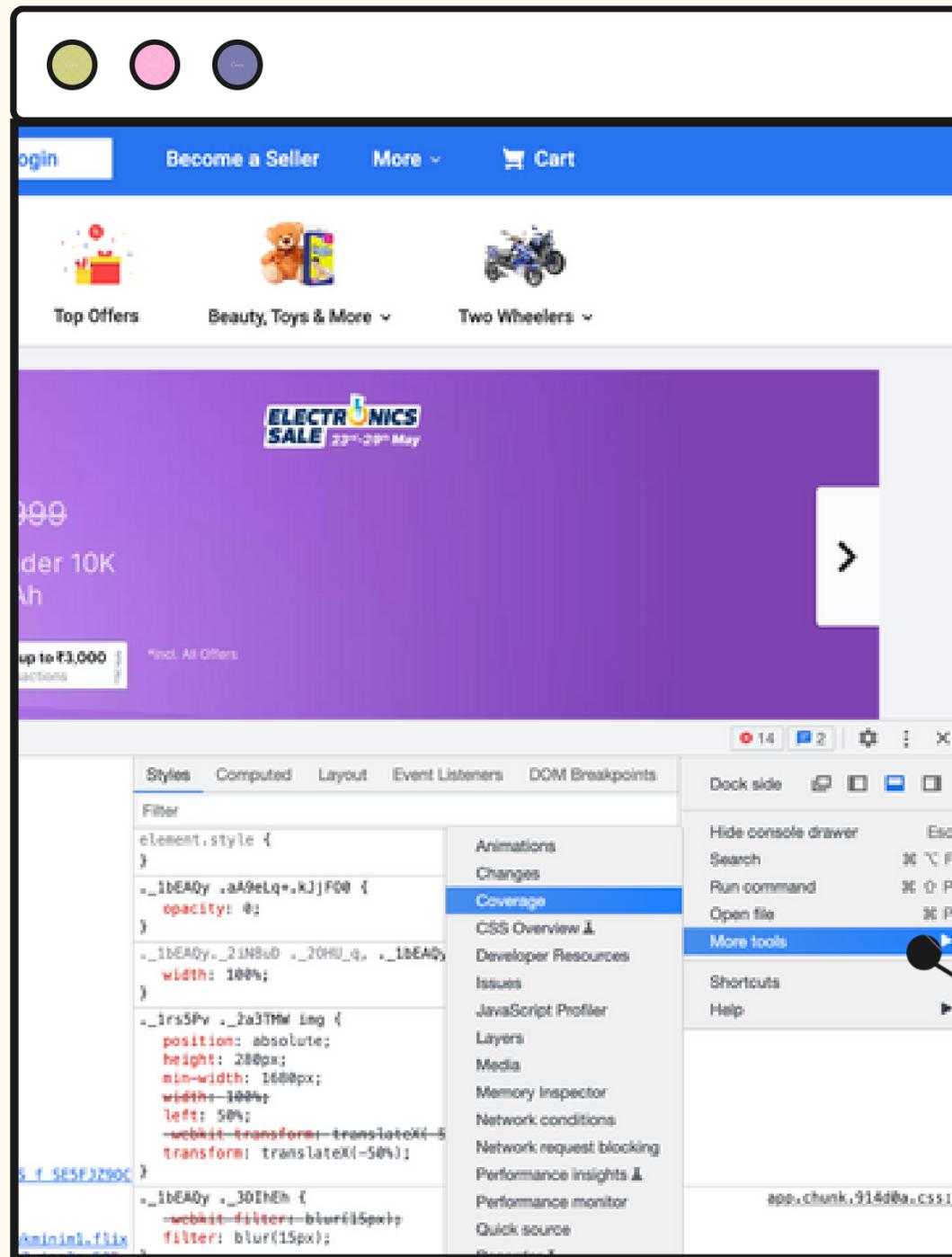


2

**OPEN THE COVERAGE TAB**

2.1

Click on the 3-dot menu icon on Developer tools, a dropdown menu will open up.

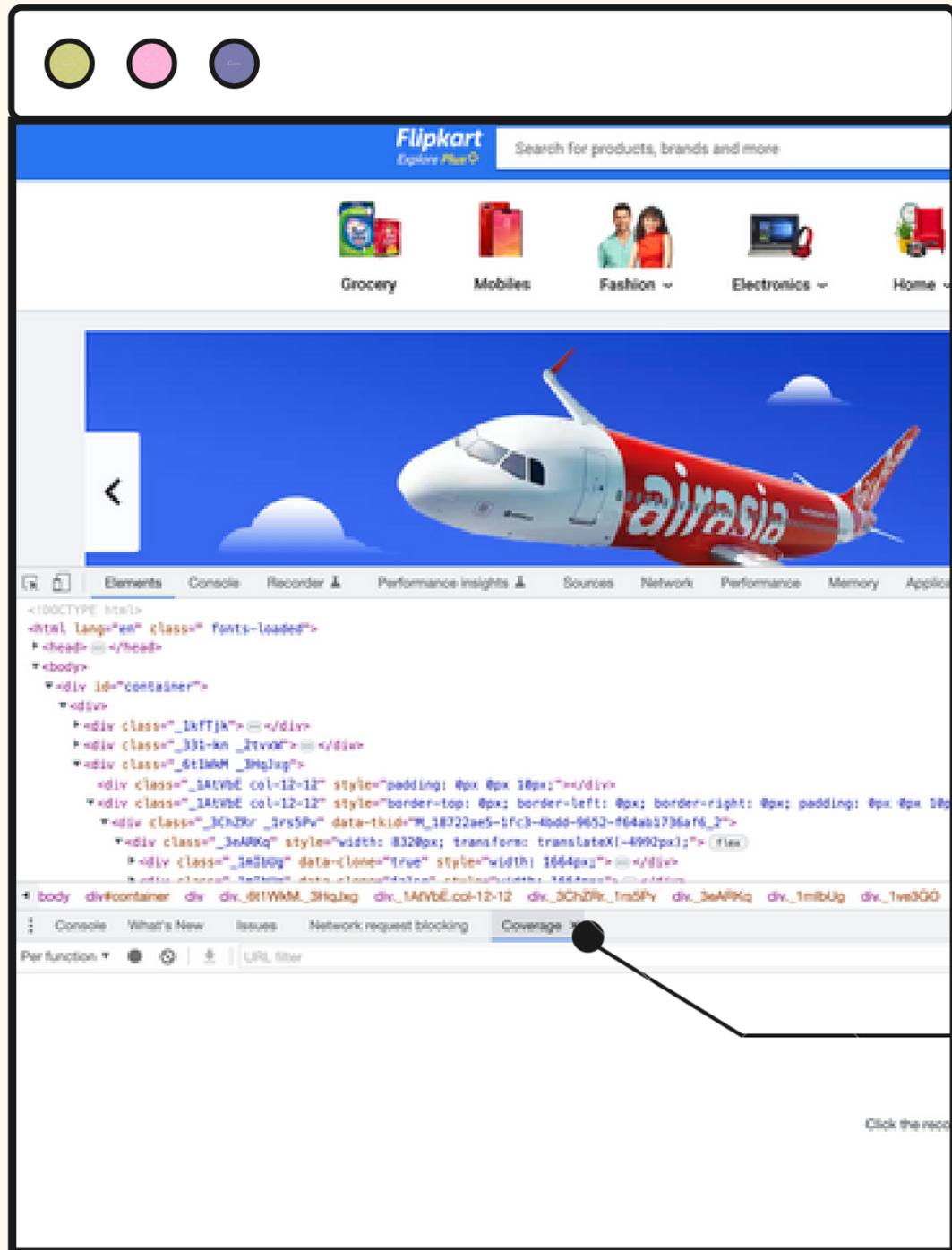


2

**OPEN THE COVERAGE TAB  
(CONT.)**

2.2

Click on the "More tools" option from the menu, another menu will open up, where we need to click on the "Coverage" option



2

**OPEN THE COVERAGE TAB  
(CONT.)**

2.3

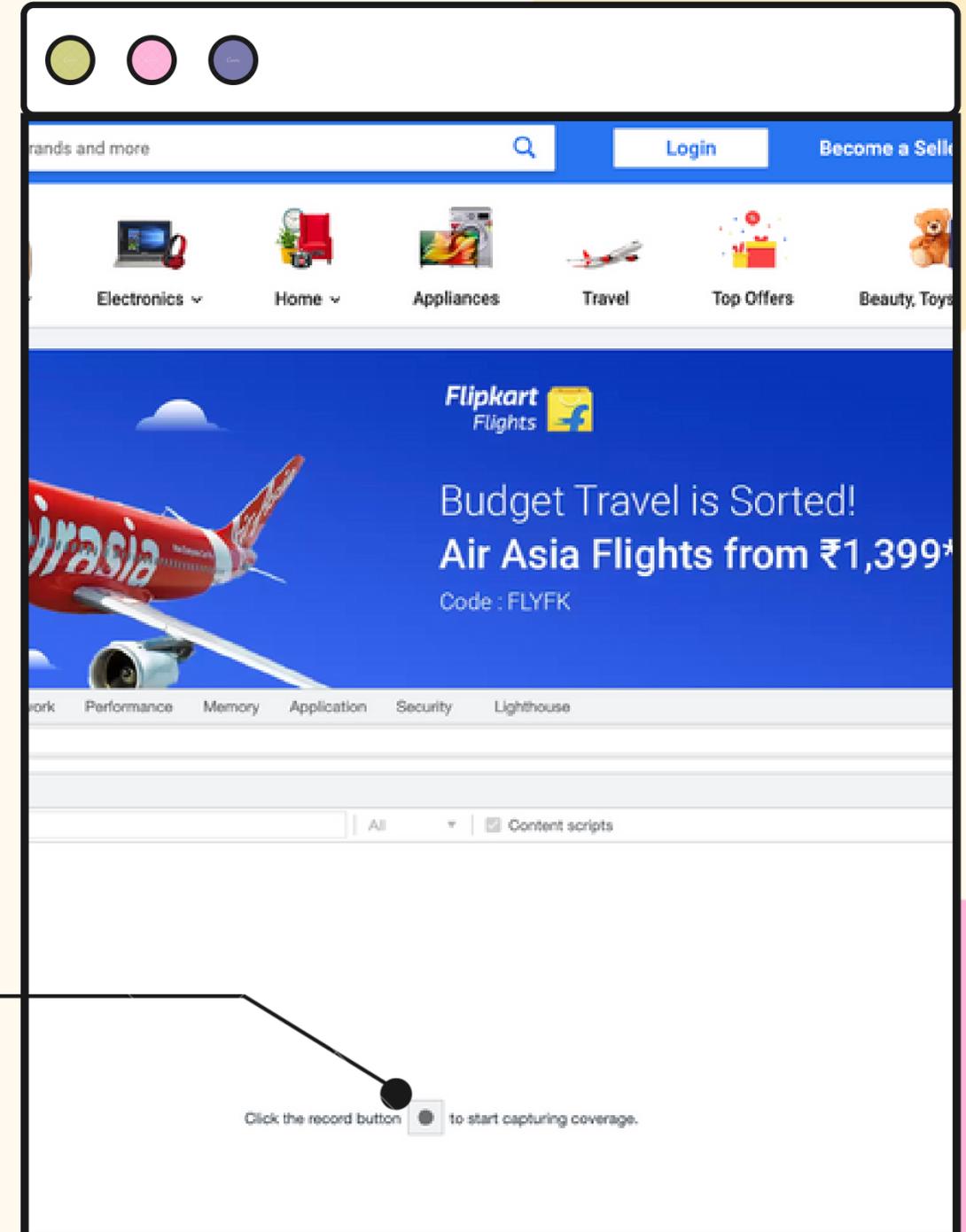
A new tab for Coverage will show up in the Developers tools panel

3

## ANALYSE CODE COVERAGE

3.1

We can now start the analysis for unused code by clicking on the record button on coverage tab



The screenshot shows a web browser window displaying the Flipkart homepage. The browser's developer tools are open, and the 'Coverage' tab is selected. The page content includes a search bar, navigation links for 'Login' and 'Become a Seller', and a main banner for 'Flipkart Flights' advertising 'Budget Travel is Sorted! Air Asia Flights from ₹1,399+'. The 'Coverage' tab shows a list of categories: 'All', 'Content scripts', and 'Record'. A black dot is positioned over the 'Record' button, with a line pointing to a text box that says 'Click the record button to start capturing coverage.'

3

## ANALYSE CODE COVERAGE (CONT.)

3.2

Once the recording has started, we can start interacting with the application and the coverage tab will start showing up the resources along with its recorded usage

The screenshot shows a web browser window with a shopping cart page. The page features a blue header with navigation links: 'Login', 'Become a Seller', 'More', and 'Cart'. Below the header, there are promotional banners for 'Up to 80% Off', 'From 799', and 'Up to 65% Off'. The main content area displays three product listings: 'Resistance Tubes' (Min. 50% Off), 'Kids' T-shirts' (Min. 50% Off), and 'Wrist Watches' (Get 8% off). A Lighthouse performance analysis overlay is visible at the bottom of the browser window, showing a table of resources and their usage.

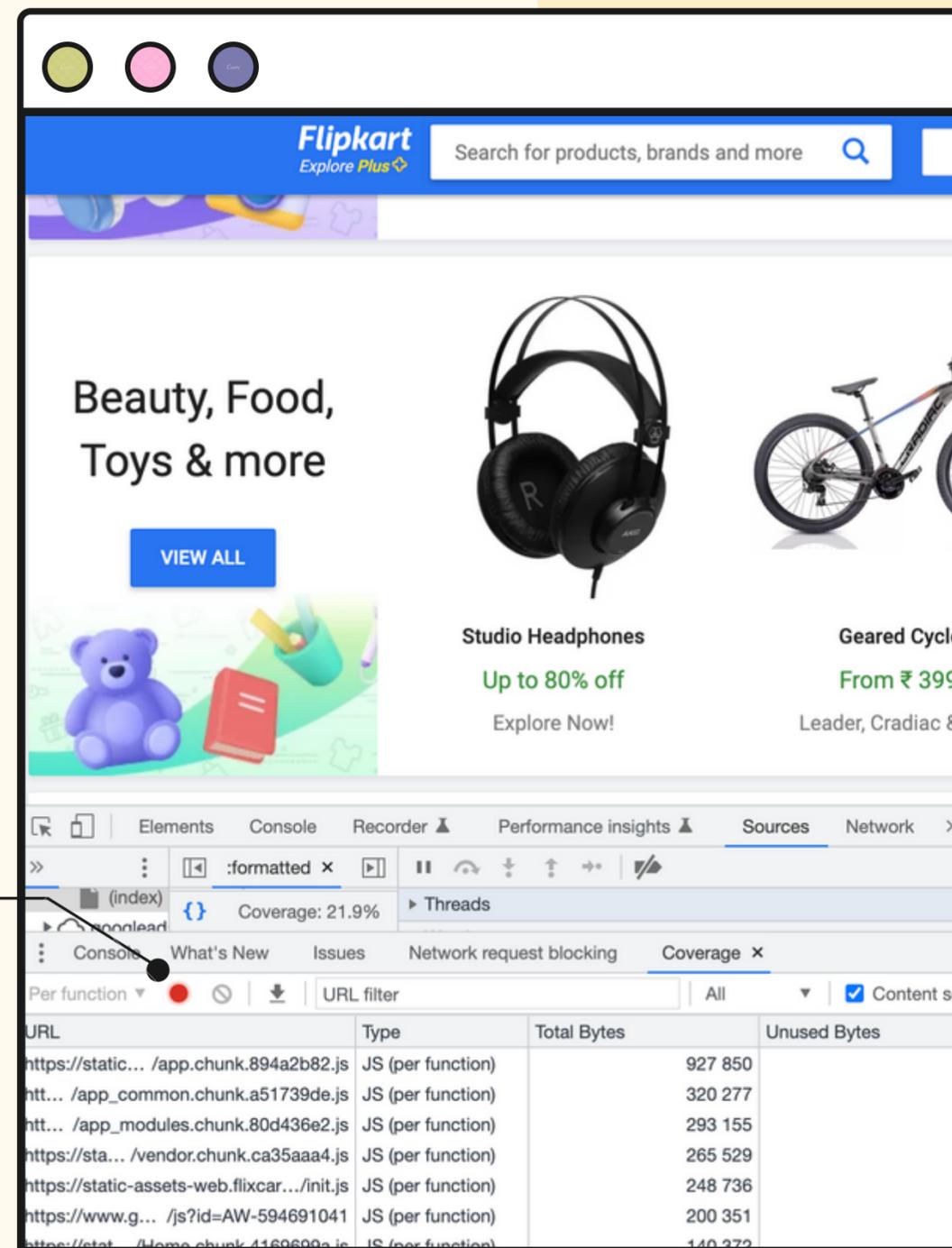
Type	Total Bytes	Unused Bytes	Usage Visualization
JS (per function)	927 800	904 714	97.5%
JS (per function)	320 377	312 657	97.6%
JS (per function)	293 155	291 866	99.6%
JS (per function)	265	257 243	99.9%
JS (per function)	248 735	244 072	98.1%
JS (per function)	200 351	156 173	77.9%
JS (per function)	140 372	136 657	97.4%
JS (per function)	133 310	117 398	88.1%
CSS	124 355	106 593	85.7%
JS (per function)	142 782	66 705	46.7%
JS (per function)	50 049	49 096	98.1%
JS (per function)	48 844	37 144	76%
JS (per function)	25 300	25 280	99.9%
CSS	50 657	25 075	51.8%

3

## ANALYSE CODE COVERAGE (CONT.)

3.3

Click on the Stop button in the Coverage tab to stop tracking code coverage



The screenshot shows the Flipkart website with the Chrome DevTools Coverage tab open. The Coverage tab displays a table of JavaScript files with their total and unused bytes. A red stop button is highlighted in the top left of the Coverage tab.

URL	Type	Total Bytes	Unused Bytes
https://static... /app.chunk.894a2b82.js	JS (per function)	927 850	
htt... /app_common.chunk.a51739de.js	JS (per function)	320 277	
htt... /app_modules.chunk.80d436e2.js	JS (per function)	293 155	
https://sta... /vendor.chunk.ca35aaa4.js	JS (per function)	265 529	
https://static-assets-web.flixcar.../init.js	JS (per function)	248 736	
https://www.g... /js?id=AW-594691041	JS (per function)	200 351	
https://stat... /home.chunk.4169699a.js	JS (per function)	140 272	

# UNDERSTANDING THE COVERAGE TABLE

Resource URL

Resource type

Total resource size

Unused resource size (with %)

Graphical representation of usage



URL	Type	Total Bytes	Unused Bytes	Usage Visualization
/app.chunk.	JS (per function)	927 850	904 714 97.5%	
/app_comm	JS (per function)	320 277	312 657 97.6%	
/app_modul	JS (per function)	293 155	291 866 99.6%	
/vendor.chui	JS (per function)	265 529	257 207 96.9%	
htt... /init.js	JS (per function)	248 736	244 072 98.1%	
/js?id=AW-5	JS (per function)	200 351	156 173 77.9%	
/Home.chun	JS (per function)	140 372	136 657 97.4%	
/MulwidgetE	JS (per function)	133 310	117 398 88.1%	
/app.chunk.	CSS	124 355	106 498 85.6%	
/TravelHome	JS (per function)	142 782	66 705 46.7%	
/nr-spa-121	JS (per function)	50 049	49 096 98.1%	
h/omni16.js	JS (per function)	48 844	37 144 76%	
/runtime.b3	JS (per function)	25 300	25 280 99.9%	
/Home.chun	CSS	30 657	25 075 81.8%	
https://w.../	CSS+JS (per fun...)	31 585	24 681 78.1%	
/TravelHome	CSS	23 862	21 718 91%	
/MulwidgetE	CSS	2 422	2 052 84.7%	
/CreativeBar	JS (per function)	4 255	713 16.8%	



# UNDERSTANDING THE COVERAGE TABLE

Clicking on any resource will show the line-by-line coverage details

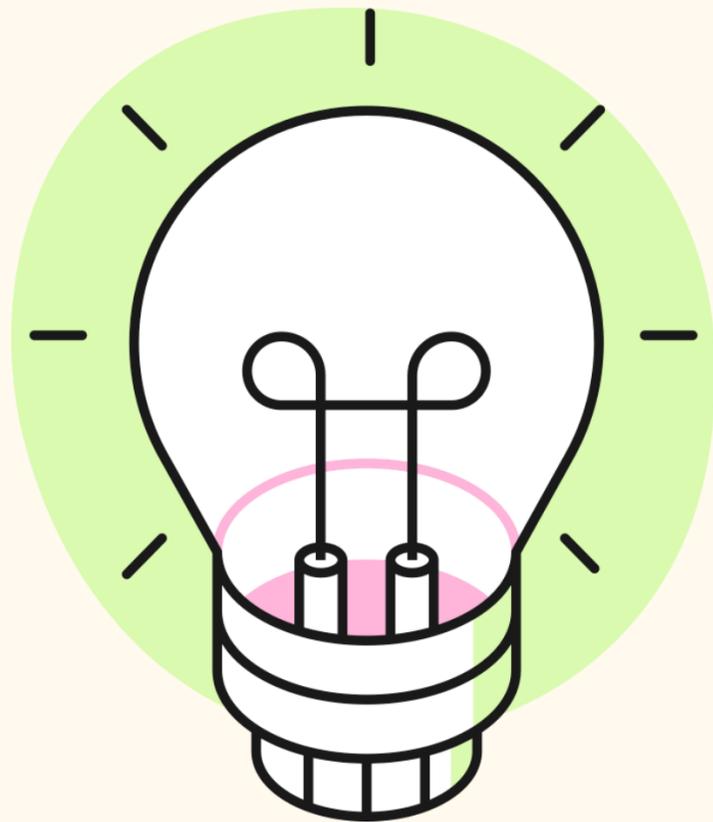
URL	Type	Total Bytes	Unused
/app.chunk.	JS (per function)	927 850	Unused
/app_comm	JS (per function)	320 277	
/app_modul	JS (per function)	293 155	
/vendor.chu	JS (per function)	265 529	
htt... /init.js	JS (per function)	248 736	
/js?id=AW-5	JS (per function)	200 351	
/Home.chun	JS (per function)	140 372	
/MulwidgetE	JS (per function)	133 310	
/app.chunk.	CSS	124 355	
/TravelHome	JS (per function)	142 782	
/nr-spa-121	JS (per function)	50 049	
h/omni16.js	JS (per function)	48 844	
/runtime.b3	JS (per function)	25 300	
/Home.chun	CSS	30 657	
https://w.../	CSS+JS (per fun...	31 585	
/TravelHome	CSS	23 862	
/MulwidgetE	CSS	2 422	
/CreativeBar	JS (per function)	4 255	

Unused

Used

```
TravelHome.chun...3.js:formatted x
325     if (!e)
326         return;
327     if ("string" == typeof e)
328         return Y(e, t);
329     var n = Object.prototype.toString.call(e).slice(8, -1);
330     "Object" === n && e.constructor && (n = e.constructor.name);
331     if ("Map" === n || "Set" === n)
332         return Array.from(e);
333     if ("Arguments" === n || /^(?:Ui|I)nt(?:8|16|32)(?:Clamped)?Array$/.te
334         return Y(e, t)
335     )(e, t) || function() {
336         throw new TypeError("Invalid attempt to destructure non-iterable insta
337     }()
338 }
339 function Y(e, t) {
340     (null == t || t > e.length) && (t = e.length);
341     for (var n = 0, r = new Array(t); n < t; n++)
342         r[n] = e[n];
343     return r
344 }
345 function W(e, t) {
346     if (!(e instanceof t))
347         throw new TypeError("Cannot call a class as a function")
348 }
349 function H(e, t) {
350     for (var n = 0; n < t.length; n++) {
351         var r = t[n];
```

## NOTE



It's important to note that when code is flagged as unused during coverage recording, it doesn't necessarily mean it will never be used. It simply indicates that it was not utilized during the specific period of coverage analysis. Consider an if-else block as an example: Only the block with a true condition gets executed, resulting in the remaining blocks being marked as unused. However, this doesn't render the other blocks unnecessary throughout the entire lifespan of the application.

**Thank  
you!**

**learn,  
share &  
follow.**

