URL Bar Resizing

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The resizing behavior of the URL bar is changing in Chrome on Android starting in version 56. Here's what you should know:

Lengths defined in viewport units (i.e. `vh`) will not resize in response to the URL bar being shown or hidden. Instead, `vh` units will be sized to the viewport height as if the URL bar is always hidden. That is, `vh` units will be sized to the "largest possible viewport". This means `100vh` will be larger than the visible height when the URL bar is shown.

The Initial Containing Block (ICB) is the root containing block used when sizing elements relative to their parents. For example, giving the `<html>` element a style of `width: 100%; height: 100%` will make it the same size as the ICB. With this change, the ICB will not resize when the URL bar is hidden. Instead, it will remain the same height, as if the URL bar were always showing ("smallest possible viewport"). This means an Element sized to the ICB height will not completely fill the visible height while the URL bar is hidden.

There is one exception to the above changes and that is for elements that are `position: fixed`. Their behavior remains unchanged. That is, a `position: fixed` element whose containing block is the ICB will resize in response to the URL bar showing or hiding. For example, if its height is `100%` it will always fill exactly the visible height, whether or not the URL bar is shown. Similarly for `vh` lengths, they will also resize to match the visible height taking the URL bar position into account.

There are a few reasons for this change:

- Usable `vh` units on mobile. Prior to this, using `vh` units meant a page would reflow jarringly everytime the user changed scroll direction.
- Improved user experience. If a page reflows while the user is reading they may lose their relative location in the document. This is frustrating but also incurs additional processor usage and battery drain to relayout and repaint the page.
- Improved interoperability with Safari on iOS. The new model should match how Safari behaves, making life easier for web developers. The unintuitive choice of making `vh` units the largest possible viewport but the ICB the smallest possible is to match Safari's behavior.

For fullscreen scenarios, where the URL bar is locked to a hidden state, the ICB will use the full screen height. This is consistent with the definitions above since "smallest possible viewport" will be the full viewport as the URL bar doesn't show on scroll.

Demo

- Here's a demonstration. The four bars on the right of the page are all possible combinations of **99%**, **99vh**, **`position:fixed`** and **`position:absolute`** provided on a scrollable page. Hiding the URL bar shows how it affects each. Resize events are printed down the page.

Support

- Chrome 56 on Android.

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