new viewport units!

vh

lvh

svh

dvh

why we need them???

the existing units work well on desktop, but on mobile devices we have some challenges.

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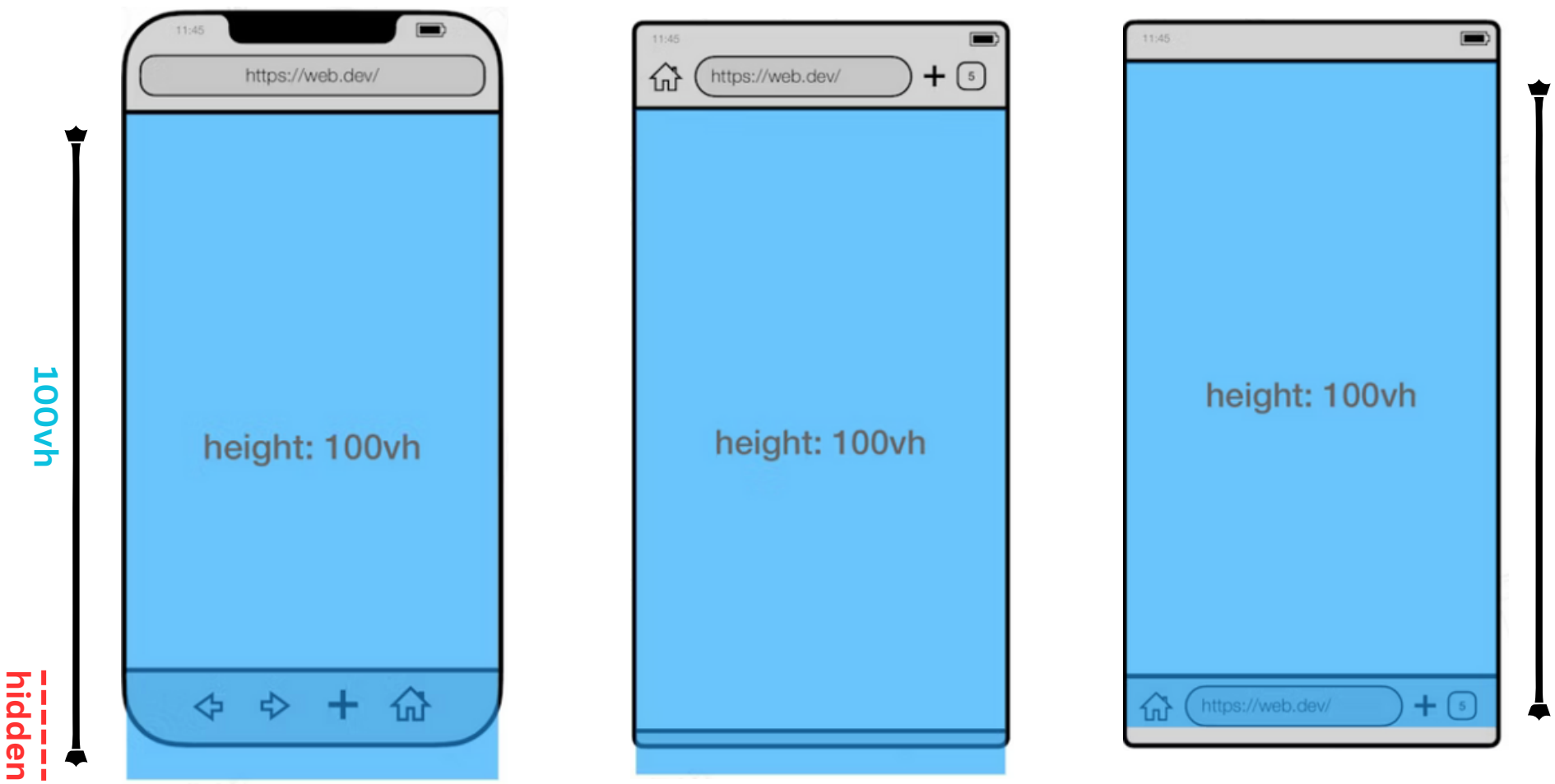
vh

the viewport size is influenced by the presence or absence of **dynamic toolbars** (address bars and tab bars).
Although the viewport size can change, the vw and vh sizes do not. As a result, elements sized to be 100vh tall will bleed out of the viewport.



To solve this problem we can use **lvh**, **svh**, **dvh**.

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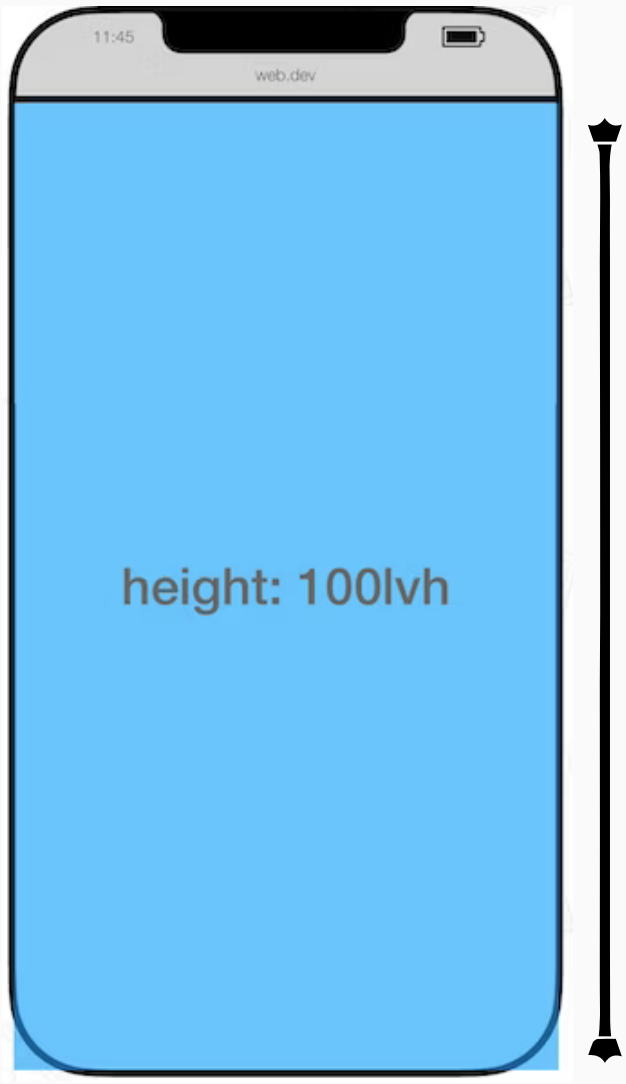
lvh

Unit lvh reflects the largest possible viewport height visible to the user.



the viewport sized assuming any UA interfaces that are dynamically expanded and retracted to be retracted. This allows authors to size content such that it is guaranteed to fill the viewport, noting that such content might be hidden behind such interfaces when they are expanded.

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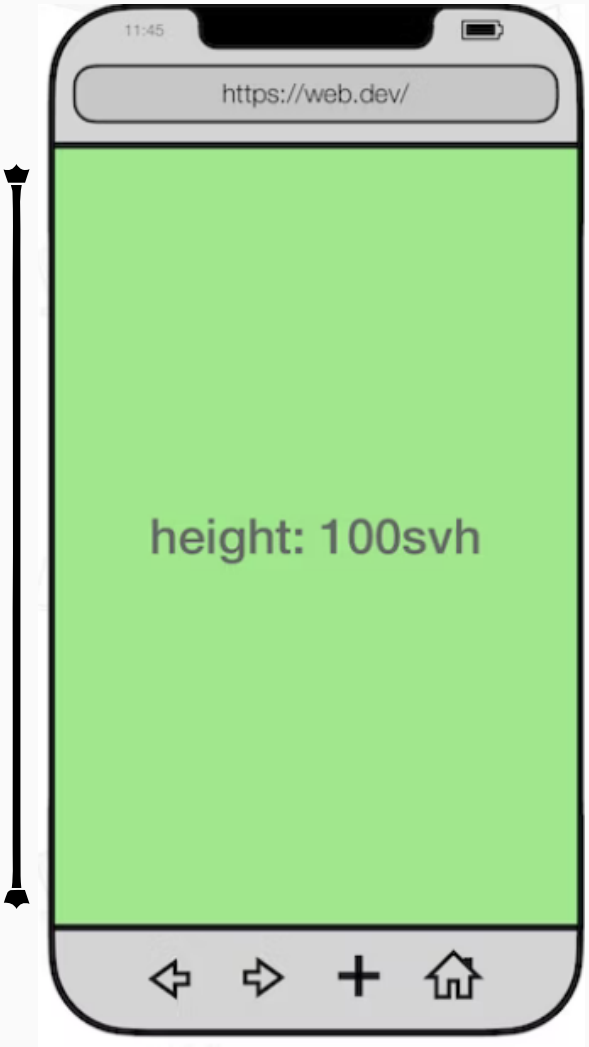
lvh

Unit svh reflects the smallest possible viewport height that is visible to the user. The smallest possible viewport height excludes all interface elements by the user agent.



the viewport sized assuming any UA interfaces that are dynamically expanded and retracted to be expanded. This allows authors to size content such that it can fit within the viewport even when such interfaces are present, noting that such content might not fill the viewport when such interfaces are retracted.

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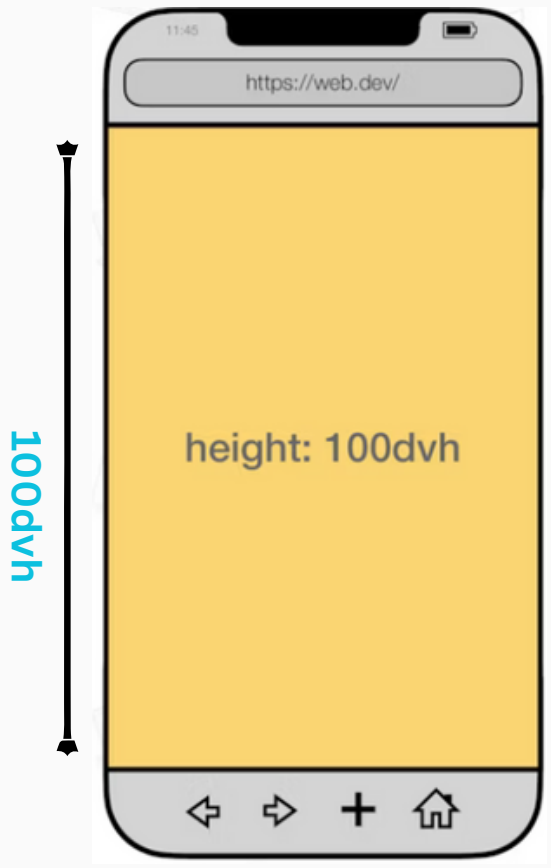
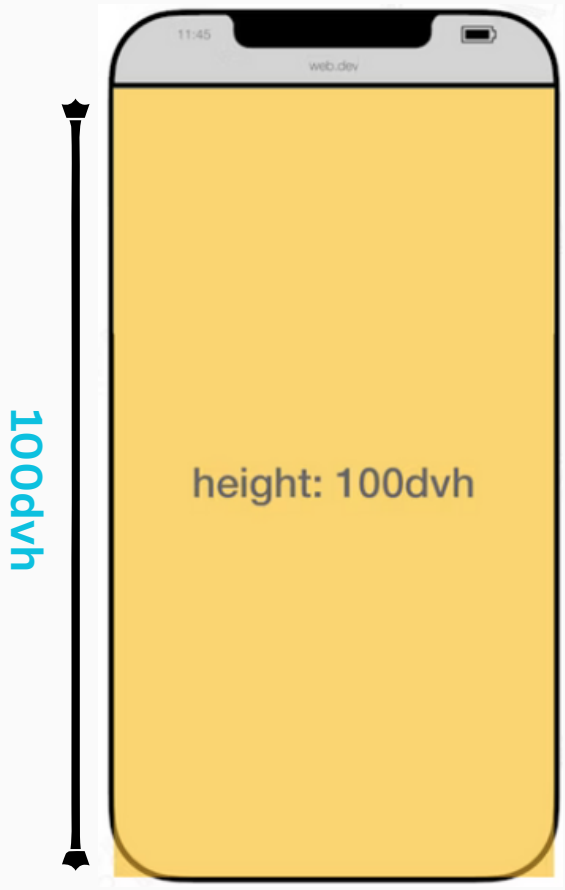
dvh

Unit dvh reflects the current viewport height.

This unit excludes the user agent's interface, unlike unit vh, and updates as the current viewport height changes.
Unit dvh reflects how much vertical viewport height the user agent's interface currently takes up. For instance, this will change as you scroll down a page on mobile, since the mobile URL bar moves out of your screen.





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warnings

- None of the viewport units take the size of **scrollbars** into account.

- The **on-screen keyboard** (also known as the virtual keyboard) is not considered part of the UA UI. Therefore it does not affect the size of the viewport units.

References

- https://www.w3.org/TR/css-values-4/#dynamic-viewport-size
- https://web.dev/viewport-units/
- https://www.terluinwebdesign.nl/en/css/incoming-20-new-css-viewport-units-svh-lvh-dvh-svw-lvw-dvw/

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