How to make a div take the remaining height

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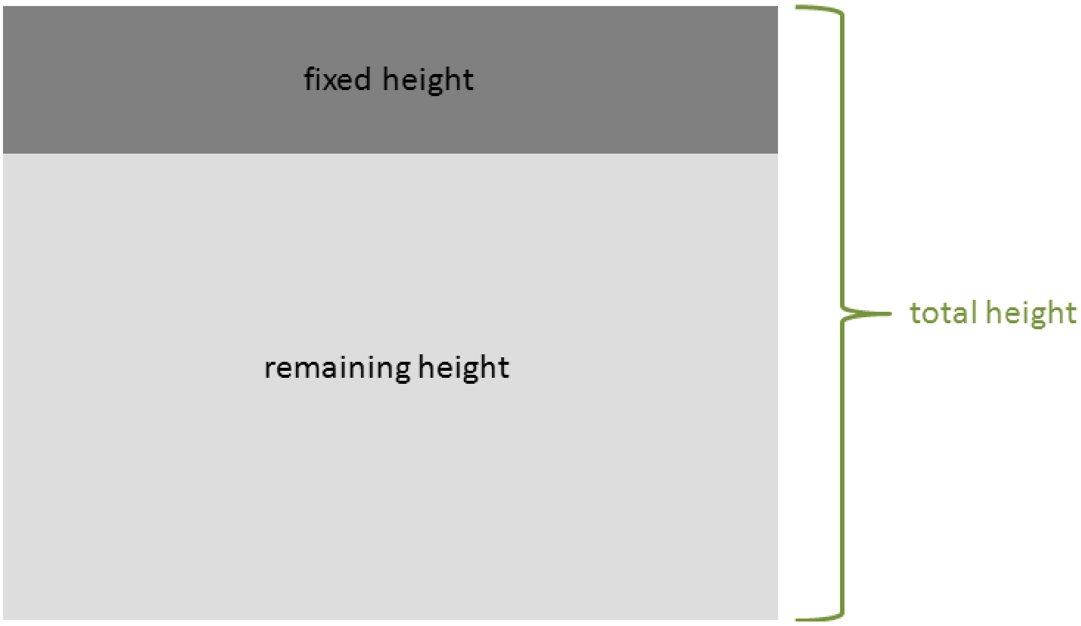
You would think that such a basic problem would be solved within seconds of try and error or after a small trip to our favorite search engine.



But I personally had to come to the conclusion that it is not that simple, at least when you want to have a "CSS only" solution. To this day I stumbled across various approaches to solve this problem.

Solution 1 – Flex

This approach makes use of the fairly well supported (https://caniuse.com/#feat=flexbox) flexbox layout.

HTML:

```
<div id="outer">
  <div id="inner_fixed">
    I have a fixed height
  </div>

  <div id="inner_remaining">
    I take up the remaining height
  </div>
</div>
```

CSS:

```
#outer {
  display: flex;
  flex-flow: column;
  height: 100%;
}

#inner_fixed {
  height: 100px;
  background-color: grey;
}

#inner_remaining {
  background-color: #DDDDDD;
  flex-grow : 1;
}
```

JSFiddle

http://jsfiddle.net/36u4bxL1/ (http://jsfiddle.net/36u4bxL1/)

pros

- easy to implement
- modern

cons

- browser support

Solution 2 – Absolute Positioning

This approach uses absolute positioning to “stretch” the div between two given heights.

HTML:

```
<div id="inner_fixed">
    I have a fixed height
</div>

<div id="inner_remaining">
    I take up the remaining height
</div>
```

CSS:

```
html, body {
    height: 100%;
    width: 100%;
    margin: 0;
}

#inner_fixed {
    height: 100px;
    background-color: grey;
}

#inner_remaining {
    background-color: #DDDDDD;

    position: absolute;
    top: 100px;
    bottom: 0;
    width: 100%;
}
```

JSFiddle

http://jsfiddle.net/Lv6uj/ (http://jsfiddle.net/Lv6uj/)

pros

- easy to implement
- intuitive

cons

- tedious to maintain (hard-coded positions)

Solution 3 – Tables (or rather display: table)

By utilizing the property of tables to distribute the given space between the rows and assigning fixed heights to some element, the other elements end up using the remaining height.

HTML:

```
<div id="outer">
    <div id="inner_fixed">
        I have a fixed height
    </div>

    <div id="inner_remaining">
        I take up the remaining height
    </div>
</div>
```

CSS:

```
html, body, #outer {
    height: 100%;
    width: 100%;
    margin: 0;
}

#outer {
    display: table;
}

#inner_fixed {
    height: 100px;
    background-color: grey;

    display: table-row;
}

#inner_remaining {
    background-color: #DDDDDD;

    display: table-row;
}
```

JSFiddle

http://jsfiddle.net/fT8gZ/ (http://jsfiddle.net/fT8gZ/)

pros

- rather “clean” solution
- no hard-coded values, other elements can change their height

cons

- might cause some side-effects with the layout

Solution 4 – CSS3 calc

This approach makes use of the new css function calc(link) to assign a height that is calculated from the total height minus the height of the other elements.

HTML:

```
<div id="inner_fixed">
    I have a fixed height
</div>

<div id="inner_remaining">
    I take up the remaining height
</div>
```

CSS:

```css
html, body {
    height: 100%;
    width: 100%;
    margin: 0;
}

#inner_fixed {
    height: 100px;
    background-color: grey;
}

#inner_remaining {
    background-color: #DDDDDD;

    height: calc(100% - 100px);
}
```

JSFiddle

http://jsfiddle.net/9d2b7/ (http://jsfiddle.net/9d2b7/)

pros

- easy to implement
- less code than the other solutions

cons

- the calc function is rather new (no support for older browsers)
- tedious to maintain (hard-coded height)

There are also other ways to archive this effect e.g. by pushing down the lower element by an floating upper element or using the new css grid (https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Grid_Layout) but nowadays I tend to use flex and the other above solutions as needed.

Related Posts:

1. **Beautiful CSS3 loading animation overlay with custom message (https://www.whitebyte.info/programming/html/beautiful-css3-loading-animation-overlay-with-custom-message)**

   I recently stumbled over a beautiful loading animation that is completely done in CSS3 (link): All i had to do was fixing a small bug…

CSS (HTTPS://WWW.WHITEBYTE.INFO/CATEGORY/PROGRAMMING/CSS). PERMALINK (HTTPS://WWW.WHITEBYTE.INFO/PROGRAMMING/CSS/HOW-TO-MAKE-A-DIV-TAKE-THE-REMAINING-HEIGHT).