**Css**

**css is used to comtrol the :**

* **layout of the page**
* **color of the text**
* **size of the font**
* **spacing between the text**
* **width and height of the elements**

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| --- |
| 1. **COMMENTS IN CSS /\* \*/** |
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| 1. **syntax in css:-** 2. **h1{ color:red ; font-size: 12px;}** 3. **h1 is selectors** 4. **{ .. ..} declaration block {color:red….} is declaration** 5. **{property :value}** |
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| 1. **INLINE CSS:-** 2. **CSS property applied directly in HTML page.** 3. **All HTML tags has attribute “style”** 4. **eg:- <h1 style=”color:red”> heading </h1>** |
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| 1. **INTERNAL CSS**   **<head> <style type=”text/css”> h1{ color:red;} </style>** |
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| 1. **EXTERNAL CSS**   **<head> <link rel=”stylesheet” type=”text/css” href=”file location” media=”screen” /></head>** |
|  |
| 1. **LINKING OF CSS or inheritance of css** 2. **@import “style2.css” ;**   **SELECTOR IN CSS or type selector**  **eg h1{ color:red; }**  **universal selector**  **eg \*{ color:red;}**  **will be applied whole page including body tag** |
| 1. **CLASS SELeCTOR (.)** 2. **eg .selector{ property}** 3. **eg .red-border{ border-style:solid; border color:red;} then** 4. **<h1 class=”red-border”> dfs </h1>** 5. **or** 6. **h1.red-border{property} only applies to h1 tag** |
|  |
| 1. **Id selector(#)** 2. **eg #selector{ property }**   **eg #red-border{ border-style:solid; border color:red;}**  **<h1 id=”red-border”> sdf </h1>**  **difference between id and class is in id only one attribute can be use and unique and id should be one per elements where in class many attributes can be used;** |
|  |
| 1. **Attribute Selector** 2. **eg p[class]{ property }**   **eg p[class]{ color:red;} p[class=color-blue]{ color:red;}**  **<p class=”” > text </p> <p class=”color-blue” > text </p>** |
| 1. **Child selector(>)** 2. **eg p>a{ property}**   **eg**  **p>a{color:green;}**  **<p> hello <a href=””> world </a></p> then world will be in green color.** |
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| 1. **DESCENDENT SELECTOR** 2. **eg selector selector{ property } body parent and a child**   **eg body a { color:red;} any <a> in <body> should be red** |
| 1. **Adjacent sibling selectors(+)** 2. **eg div+a{ property}** |
| 1. **General Adjacent sibling selectors(~)** 2. **eg div~a{ property}** |
|  |
| 1. **Pseudo class and elements** 2. **eg selector : pseudo class{ property}**   **eg**  **a : visited{ color:gray;}**  **a : active{ color:green;}**  **a : hover{ color:red;}**  **a : link{ color:orange;}**  **pseudo elements**  **eg selector::pseudo elements{property}**  **eg**  **p::after{ content =”111”}** |
| 1. **Css presendence rule** 2. **eg** 3. **.class{ color:red!important} so it can not be overrideen** |
| 1. **Font attributes**   **font-family: “Times New Roman” , serif;**  **font-size:200px;**  **line-height:2em;**  **letter-spacing:0.2em;**  **text-shadow:none;**  **word-spacing:1em;**  **font-style:italic**  **font-weight: bold**  **text-transform:uppercase;**  **text-indent:500px;**  **text-shadow:1px 1px** |
|  |
| 1. **Colors**   **eg**  **.redboxRGB{ background-color:rgb(255,0,0);}**  **redboxHEX{ background-color:#ff00000 ;}**  **redboxNAME{ background-color: red ;}**  **redboxDARKNAME{ background-color: darkred ;}** |
| 1. **CSS BOX**   **.box{ background-color:red; height: 100px ; width:300px;}**  **width height minheight minwidth maxwidth maxheight**  **border in the box**  **border-style: solid; = control the style of the line-height**  **border-color:red;**  **border-top-style:dashed;**  **border-bottom-style: dotted;**  **border:5px solid color;**  **margins of the box**  **margin**  **margin-top**  **margin-bottom right left**  **box padding spaces inside box**  **padding-top bottom left right** |
|  |
| 1. **Moving or floating box in css**   **float is used for moving boxes**  **eg**  **.blue{ background-color:blue; float:left;}**  **\*\*\*\*\*“clearfix” tag is used with floating to arrange in proper order\*\*\*\*\*\*\*\*\*\***  **clearfix breaks the line and start with new line.**  **eg < div class=”clearfix”> <img src class=”float-left” *> <p> ad <*p> </div>** |
| 1. **HORIZONTAL AND VERTICAL MENU**   **ul{ background-color:black; list-style-type:none; overflow: hidden}**  **li{ float:left;}**  **li a{ background-color=white text-decoration:none; display:inline-block/none/block};**  **<ul> <li> home </li><li> contact </li><li> blog </li><li> help </li></ul>** |
| 1. **POSITIONINF BOXES**   **fixed position**  **body,html{ height:100%;}**  **.announcement-top{ background-color:red; color:white; padding =20px**  **opacity: .83; position: fixed; left=0 ; right =0 , top =0;}**  **.announcement-bottom{ background-color:red; color:white; padding =20px**  **opacity: .83; position: fixed; left=0 ; right =0 bottom=0;}**  **<div class=” announcement-top”> top </div>**  **<div class=” announcement-bottom”> bottom </div>** |
| 1. **Absolute position**   **.box{ background-color:red; height , width , top ,left ; positon:absolute;}**  **.container{ background-color:blue; margin-left; margin-top ; }**  **<div class=”.container”> container**  **<div class=”.box”> box </div> </div>**  **here if we put absolute the box will take value of html and not container. Here we take inheritance so box should take action depending upon contaiiner values . But absolute position take html value ie 0,0;**  **or we can use reletive position to position inside container** |
| 1. **DISPLAY INLINE OR BLOCK** 2. **li{ display:inline; } in one line** 3. **li{display:block;} in new line** 4. **li{display: inline block;} both** |
| 1. **Adding google fonts** 2. **serach google font then press + then add links in css and body** |
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| 1. **Project page layout** 2. **header navigation** 3. **aside left content aside right** 4. **footer** 5. **css properties** 7. **body{** 8. **width:940px;** 9. **margin:0 auto; to make in center** 10. **font: 10pt/1.5em “Georgia”,Arieal, sans-serif;** 11. **}** |
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| 1. **Css further https://devdocs.io/css/** 2. **https://cssreference.io/** |
| 1. **Box-sizing: border-box == fix box size and does not change even margins or padding in increase or decrese** |
| 1. **@media screen and (max-width=565px){ }** |
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| 1. **Attribute** |
| 1. **Background : color //backgroud color** |
| 1. **Background : url(“mg url ) //background img** 2. **background-repeat = no repeat; // no repeat background no strech** |
| 1. **Background-size = cover // streches the background** |
|  |
| 1. **Border in css has three part** |
| 1. **Border-color: color;** 2. **border-width: 5px;** 3. **border-style: solid, dash, dotted** 4. **or**   **border: 5px solid purple;** |
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| 1. **Text-decoration:line-through; //strikes the text** 2. **text-align = center;** |
| 1. **Li:nth-of-type(3) { // nth of type selector it will select every 3** 2. **background:purple } ;** |
| 1. **Input:checked {** 2. **margin-left:50px;** 3. **}** |
| 1. **#special:first-letter {** 2. **color:green;** 3. **font-size:100px; }** |
| **box model** |
| 1. **Content padding border margin** |
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| **div css property**  **div{**  **float:left;** |
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| 1. **Body{** 2. **max-width = 700px; //content size at max value or grter than 720** 3. **width:80%; when screen resolution decrease** |
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| 1. **Inline elemrnt** 2. **<span> <a> <img>** |
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| 1. **Visibility:hidden //hide element but leave its area** 2. **display: none //hide element completely** |
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| 1. **Content is everything** 2. **order comes from html code** 3. **children sit on parents** 4. **position** |
|  |
| 1. **Static default // four position property** 2. **relative** 3. **absolute** 4. **fixed** |
| **Dynamic text size in pixel/16 = ans in em;**  **90px/16 = 562.5 em; //changes accordiing to browser** |
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|  |
| 1. **<header>** 2. **<nav>** 3. **<div c-logo > <h1 c- >logo name** 4. **<div c-menu> <a href >home** 5. **<main>** 6. **<section>** |
|  |
| 1. **Header{** 2. **width:100%;** 3. **height:100vh;** 4. **background-image=url }** |
|  |
| 1. **nav{width: 100%;** 2. **height: 10vh;** 3. **color: white;** 4. **background: orange;** 5. **display: flex;** 6. **justify-content: space-between;** 7. **align-items: center;** 8. **}** |
| **x index**    **it require position such as absolute or reletive**  **default value is 0**  **z-index:-1;** |
| 1. **Media Query** 2. **@media (max-width: 900) {**     **}** |
|  |
| 1. **Css Real project topic and tips** |
| 1. **Basic before project**   **\* {**  **margin: 0;**  **padding: 0;**  **box-sizing: border-box;**  **}**  **body {**  **font-family: "lato", sans-serif;**  **font-weight: 400px;**  **font-size: 16px;**  **line-height: 1.7;**  **color: #777;**  **padding:30px;**  **}** |
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| 1. **Img as background**   **.header {**  **height: 95vh;**  **background-image: linear-gradient(to left, #7ed56f, #28b485),**  **url(img/hero.jpg);**  **background-size: cover;**  **background-position: top;**  **clip-path: polygon(0 0, 100% 0 , 100% 70vh, 0 100%);**  **}**  **// background-image: linear-gradient(to right bottom, #7ed56f, #28b485)**  **starts from left and end to right bottom**  **opacity to 0.7-0.9** |
| **clip path // help to add shapes to imgs**  **clip-path: polygon(0 0, 100% 250px , 0 100%);** |
| 1. **Position any div in center**   **position: absolute;**  **top: 50%;**  **left: 50%;**  **transform: translate(-50%, -50%);** |
| **Animation**  **browser are optimised for opacity and transform properties**  @keyframes moveInLeft {  0% {  opacity: 0;  transform: translate(-100px);  }  80% {  transform: translate(20px);  }  100% {  opacity: 1;  transform: translate(0);  }  }  .heading-primary-main {  display: block;  font-size: 60px;  font-weight: 400;  letter-spacing: 35px;  animation-name: moveInLeft;  animation-duration: 2s;  animation-iteration-count: 3;  animation-timing-function: ease-out;  }  backface-visibility: hidden; // add this in parent class during animation for smooth animation |
| 1. **Button animation**   **.btn:link,**  **.btn:visited {**  **text-decoration: none;**  **text-transform: uppercase;**  **padding: 15px 40px;**  **display: inline-block;**  **border-radius: 100px;**  **transition: all 0.2s;**  **position: relative;**  **}**  **.btn:hover {**  **transform: translateY(-3px);**  **box-shadow: 0 10px 20px rgba(0, 0, 0, 0.2);**  **}**  **.btn:active {**  **transform: translateY(-1px);**  **box-shadow: 0 5px 10px rgba(0, 0, 0, 0.2);**  **}**  **.btn-white {**  **background-color: #fff;**  **color: #777;**  **}**  **.btn::after {**  **content: "";**  **display: inline-block;**  **height: 100%;**  **width: 100%;**  **border-radius: 100px;**  **position: absolute;**  **top: 0;**  **left: 0;**  **z-index: -1;**  **transition: all 0.2s;**  **}**  **.btn-white::after {**  **background-color: #fff;**  **}**  **.btn:hover::after {**  **transform: scaleX(1.4) scaleY(1.4);**  **opacity: 0;**  **}**  **.btn-animated {**  **animation: moveInBottom 0.5s ease-in 0.75s;**  **animation-fill-mode: backwards; //for animation to start after some ..**  **}** |
| 1. **Saas and scss**   **variable**  **$color1 = #fff ; //comments white**  **background-color :$color1;**  **nesting in saas**  **.nav{**  **li{**  **&:first-child{**  **}**  **}**  **}** |
| 1. **Mixing in saas // just as function you can call in different**   **@mixin clearfix {**  **&::after{**  **content=””;**  **clear: both;**  **display: table; } }**  **nav{**  **@include clearfix; // calling the mixin**  **}** |
| 1. **@function divide($a , $b){** 2. **@return $a/$b; }** |
| 1. **7 in 1 css Architecture**   **create 7 folders in sass folder**  **abstracts base components layout pages theme**  **in abstracts create \_function.scss \_mixins.scss variables.scss**  **in base create \_animation.scss \_base.scss \_typography.scss \_utilities.scss**  **in page create \_home.scss** |
| 1. **And then import all in main.scss** 2. **@import "abstracts/\_function.scss" // import all other files also**   **but all code in all files according** |
| 1. **Respinsive design**   **fluid grids and layout use %**  **flexible/responsive images**  **media queries** |
| 1. **10px == 1 rem** |
| 1. **Grids in css**   **.row {**  **max-width: $grid-width;**  **background-color: #eee;**  **margin: 0 auto;**  **&:not(:last-child) {**  **margin-bottom: $gutter-vertical;**  **}**  **@include clearfix;**  **[class^="col-"] { //selector class ^=begin with**  **background-color: orangered; // $=end with #=contain**  **float: left;**  **&:not(:last-child) {**  **margin-right: $gutter-horizontal;**  **}**  **}**  **.col-1-of-2 { //class name in html**  **width: calc((100% - #{$gutter-horizontal}) / 2);**  **}**  **.col-1-of-3 {**  **width: calc((100% - 2 \* #{$gutter-horizontal}) / 3);**  **}**  **.col-2-of-3 {**  **width: calc( 2\*((100% - 2 \* #{$gutter-horizontal}) / 3) + #{$gutter-horizontal});**  **}**  **.col-1-of-4 {**  **width: calc((100% - 3 \* #{$gutter-horizontal}) / 4);**  **}**  **}** |
| **\*\*\*\*\*\*\*\*\*\***  **@mixin clearfix {**  **&::after {**  **content: "";**  **display: table;**  **clear: both;**  **}**  **}** |
| 1. **Give text background color**   **background-image: linear-gradient(**  **to right,**  **$color-primary-light,**  **$color-primary-dark**  **);**  **-webkit-background-clip: text;**  **color: transparent;** |
| 1. **Css trick gives some border with space between**   **outline-offset: 2rem; //parent class**  **outline: 1.5rem solid $color-primary; //in hover**  **css another trick**  &:hover &\_\_photo:not(:hover) {      transform: scale(0.95);    } |
| 1. **Direct child class** 2. **& > \* {** 3. **transform: skewY(7deg); //.section-features \* //direct child** 4. **}** |
|  |
| 1. **Adding video as background // make parent reletive**   **video {**  **position: absolute;**  **top: 0;**  **left: 0;**  **height: 100%;**  **width: 100%;**  **z-index: -1;**  **opacity: 0.2;**  **object-fit: cover;**  **overflow: hidden; }**  **adding shapes in css**  **&\_\_shape {**  **width: 15rem;**  **height: 15rem;**  **float: left;**  **-webkit-shape-outside: circle(50% at 50% 50%);**  **shape-outside: circle(50% at 50% 50%);**  **-webkit-clip-path: circle(50% at 50% 50%);**  **clip-path: circle(50% at 50% 50%); }** |
| 1. **Adding imgs in shapes**   **html file**  **<figure class="story\_\_shape">**  **<img src="img/nat-8.jpg" alt="person" class="story\_\_img" />**  **<figcaption class="story\_\_caption">**  **mary strom**  **</figcaption>**  **</figure>**  **scss //it also include some animation**  **&\_\_img {**  **height: 100%;**  **transform: translateX(-4rem) scale(1.3); //optional**  **backface-visibility: hidden;**  **transition: all 0.2s;**  **}** |
| 1. **Adding filter on imgs** 2. **&:hover &\_\_img {** 3. **transform: translateX(-4rem) scale(1);** 4. **-webkit-filter: blur(3px) brightness(80%);** 5. **filter: blur(3px) brightness(80%);** 6. **}** |
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| 1. **Adding solid color on img**   **background-image: linear-gradient(**  **105deg,**  **rgba($color-white, 0.9) 0%,**  **rgba($color-white, 0.9) 50%,**  **transparent 50%),**  **url(../img/nat-10.jpg);** |
| 1. **Form animation**   **.form {**  **&\_\_group:not(:last-child) {**  **margin-bottom: 2rem;**  **}**  **&\_\_input {**  **font-size: 1.5rem;**  **font-family: inherit;**  **color: inherit;**  **padding: 1.5rem 2rem;**  **border-radius: 2px;**  **background-color: rgba($color-white, 0.5);**  **border: none;**  **border-bottom: 3px solid transparent;**  **width: 90%;**  **display: block;**  **&::-webkit-input-placeholder {**  **color: #999;**  **}**  **&:focus {**  **outline: none;**  **box-shadow: 0 1rem 2rem rgba($color-black, 0.1);**  **border-bottom: 3px solid $color-primary;**  **}**  **&:focus:invalid {**  **border-bottom: 3px solid $color-secondary-dark;**  **}**  **}**  **&\_\_label {**  **font-size: 1.2rem;**  **font-weight: 700;**  **margin-left: 2rem;**  **margin-top: 0.7rem;**  **display: block;**  **transition: all 0.3s;**  **}**  **&\_\_input:placeholder-shown + &\_\_label {**  **opacity: 1;**  **visibility: hidden;**  **transform: translateY(-4rem);**  **}**  **}**  **html code**  **<form action="#" class="form" autocomplete="off">**  **<div class="form\_\_group">**  **<input**  **id="name"**  **type="text"**  **class="form\_\_input"**  **placeholder="Full Name"**  **required**  **/>**  **<label for="name" class="form\_\_label">Full Name</label>**  **</div>** |
|  |
| 1. **Creating own radio button**   **&\_\_radio-group {**  **width: 49%;**  **display: inline-block;**  **}**  **&\_\_radio-label {**  **font-size: 1.6rem;**  **cursor: pointer;**  **position: relative;**  **padding-left: 4.5rem;**  **}**  **&\_\_radio-button {**  **height: 3rem;**  **width: 3rem;**  **border: 5px solid $color-primary;**  **border-radius: 50%;**  **display: inline-block;**  **position: absolute;**  **top: -0.4rem;**  **left: 0;**  **&::after {**  **content: "";**  **display: block;**  **height: 1.3rem;**  **width: 1.3rem;**  **border-radius: 50%;**  **position: absolute;**  **top: 50%;**  **left: 50%;**  **transform: translate(-50%, -50%);**  **background-color: $color-primary;**  **opacity: 0;**  **transition: opacity .2s;**  **}**  **}**  **&\_\_radio-input{**  **visibility: hidden;**  **}**  **&\_\_radio-input:checked ~ &\_\_radio-label &\_\_radio-button::after {**  **opacity: 1;**  **}**  **}** |
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| 1. **Html code**   **<div class="form\_\_group">**  **<div class="form\_\_radio-group">**  **<input**  **type="radio"**  **class="form\_\_radio-input"**  **id="small"**  **name="size"**  **/>**  **<label for="small" class="form\_\_radio-label">**  **<span class="form\_\_radio-button"></span>**  **Small tour group**  **</label>**  **</div>** |
| **css new type grid system display:grid;**  **container**  **grid-template-row //grid-template-**  **grid-template-columns**  **grid-template-areas**  **grid-row-gap**  **grid-column-gap**  **justify-content**  **justify-items**  **align-items**  **align-content**  **grid-auto-rows**  **grid-auto-columns**  **grid-auto-flow**  **items**  **grid-row-start grid-row-end**  **grid-column-start**  **grid-column-end**  **justify-self**  **align-self**  **order** |
| **Attribute of grid**  **grid-template-columns : repeat(2, 150px) 1fr;**  **//1 and 2 column with 150px**  **//last will take full remaining width** |
| 1. **Change position of grid**   **&--1{**  **grid-row: 2 / 3; //start from / end with**  **grid-column 2 /3 ;**  **or**  **grid-area: 2 / 2 /3 / 3 //startrow /startcol / end row / end col }** |
| 1. **Giving grid line names**   **display:grid;**  **grid-template-row: [header-start] 100px [header-end box-start] 200px [box-end main-start] 400px [main-end footer-start] 100px [footer-end];**  **grid-column: box-start / main-end;** |
| 1. **Giving grid area names**   **grid-template-areas: “. head head head” // . for empty grid**  **“box box box side “**  **“main main main side”**  **“foot foot foot foot”;**  **.header{**  **grid-area: head;**  **}**  **.sidebar{ grid-side:side; }** |
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| 1. **Grid-auto-rows: 80px //implicit boxes with 80 px**   **grid-auto-flow: row dense; //default row , column//implicit**  **//dense – useful to remove empty holes or place in grid** |
| 1. **Align-item:center // vertical center individual item** 2. **justify-item:center //horizontal center individual item** 3. **Align-content:center // vertical center content of div** 4. **justify-content:center //horizontal center content of div** |
| 1. **Max-content and min-content**   **max-content - it take all the possible place and extend itself as contain grow**  **min-content – it shrinks content into column width height** |
| 1. **Minmax function**   **grid-template-column:minmax(200px , 300px) repeat(3 , 1fr);**  **//minmax(min value , max value) //it will remain same till min value if screen resolution is changed // It will be between min and max value** |
| 1. **Auto-fill and auto-fit //for responsive pages**   **width:90%;**  **grid-template-column: repeat(auto-fit , minmax(200px , 1fr)) ;**  **grid-auto-rows:150px;** |
| 1. **Base.scss file ------------------------------------------------**   **\*,**  **\*::before,**  **\*::after {**  **margin: 0;**  **padding: 0;**  **box-sizing: inherit;**  **}**  **html {**  **box-sizing: border-box;**  **font-size: 62.5%;**  **}**  **body {**  **font-family: $font-primary;**  **color: $color-grey-light-2;**  **font-weight: 300;**  **line-height:1.6;**  **}** |
| 1. **Grid layout**   **.container {**  **display: grid;**  **grid-template-rows: 80vh min-content 40vw repeat(3, min-content);**  **grid-template-columns:**  **[sidebar-start] 8rem [sidebar-end full-start] minmax(6rem , 1fr) [center-start] repeat(**  **8,**  **[col-start] minmax(min-content, 14rem) [col-end]**  **)**  **[center-end] minmax(6rem ,1fr) [full-end];** |
| 1. **Media query**   **0 - 600 - 900 - 1200 – infi**  **desktop-first**  **max-width:900px //code will work if width is less than 900**  **mobile-first**  **min-width:900px //if minimum is 900 then it will applied** |
| 1. **Flexbox------------------------------------------------------------**   **display:flex;**  **container**  **flex-direction:row / row-reverse / column /column-reverse**  **flex-wrap:nowrap**  **justify-content:flex-start / flex-end /center /space-between / -around / -evenly**  **align-items: stretch / flex-start / flex-end / center / baseline**  **align-content : -||-**  **ITEMs**  **align-self:auto /flex-start /-end /center / baseline**  **order:0;**  **flex-grow:0;**  **flex-shrink:1;**  **flex-basic:auto**  **or**  **flex: 0 1 auto** |
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