



Programimi në www

Pjesa 8 – CSS (4)

Prof. Asoc. Dr. Ermir Rogova

Shembull

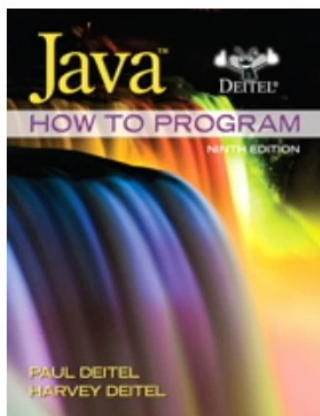
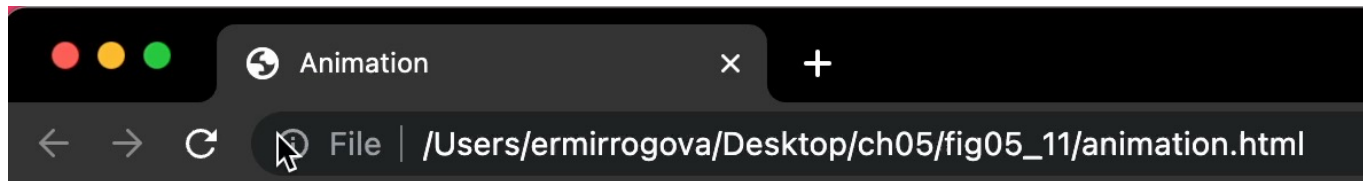
- Shembulli në vijim paraqet krijimin e një animacioni të thjeshtë në të cilën një imazh lëvizë në motiv të romboidit duke e ndryshuar transparencën.

The animation starts and ends at the top of the diamond, moving the image in the counterclockwise direction initially. When the animation reaches the top of the diamond, the animation reverses, continuing in the clockwise direction. The animation terminates when the image reaches the top of the diamond for a second time.





Shembull



Shembull

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <title>Animation</title>
    <style type = "text/css">
      img
      {
        position: relative;
        animation: movingimage linear 10s 1s 2 alternate;
      }
      @keyframes movingimage
      {
        0%   {opacity: 0; left: 50px; top: 0px;}
        25%  {opacity: 1; left: 0px; top: 50px;}
        50%  {opacity: 0; left: 50px; top: 100px;}
        75%  {opacity: 1; left: 100px; top: 50px;}
        100% {opacity: 0; left: 50px; top: 0px;}
      }
    </style>
  </head>
  <body>
    <img src = "jhtp.png" width = "138" height = "180"
      alt = "Java How to Program book cover">
  </body>
</html>
```



Animacioni

- Atributi animation mundëson paraqitjen e disa attributeve të animacionit me notacion të shkurtër, në vend se të specifikojmë secilën veq e veq, si p.sh. :
 - animation-name: movingImage;
 - animation-timing-function: linear;
 - animation-duration: 10s;
 - animation-delay: 1s;
 - animation-iteration-count: 2;
 - animation-direction: alternate;

Animacioni

- Në notacionin e shkurtër, vlerat kanë këtë rënditje:
 - emrin i animacionit — paraqet emrin (movingImage)
 - progresioni i animacionit — përcakton mënyrën e lëvizjes së animacionit gjatë një cikli. Vlerat e mundshme përfshijnë linear, ease, ease-in, ease-out, ease-in-out
 - linear tregon që animacioni do të lëvizë në mënyrë të njëtrajtshme prej fillimit deri në fund
 - vlera e paracaktuar (default) është , ease, në të cilën animacionin fillon ngadalë, përshpejtohet dhe ngadalësohet në fund
 - ease-in fillon ngadalë, pastaj përshpejtohet
 - ease-out fillon shpejt, pastaj ngadalësohet
 - kohëzgjatja e animacionit – cakton kohën në sekonda (s) ose milisekonda (ms) gjatë të cilës animacioni duhet ta përfundojë një cikël



Animacioni

- vonesa e animacionit — përcakton pas sa kohe pasi që faqja të hapet duhet të fillojë animacioni
- numri i cikleve — përcakton sa herë do të përsëritet animacioni. Për përsëritje pa mbarim përdoret infinite
- drejtimi — specifikon kahjen e animacionit. Vlera normal tregon që kahja të jetë e njëjtë për secilin cikël. Vlera e përdorur në shembull (alternate) specifikon që animacioni lëviz një cikël ashtu si është caktuar, kurse tjetrin cikël në drejtimin e kundërt
- Notacioni i shkurtër nuk mund të përdoret së bashku me atributin animation-play-state — i cili duhet të specifikohet veçmas
- Nëse nuk përfshijmë këtë atribut, i cili përcakton se a është animacioni në lëvizje apo i paqzuar, do të supozohet se është në lëvizje



Rregulla @keyframes dhe Selectorët

- Rregulla @keyframes definon atributet e elementit të cilat do të ndryshojnë gjatë animacionit, vlerat e atyre attributeve dhe kur do të ndryshojnë ato
- Rregulla @keyframes përcjellet nga emri i animacionit (movingImage) për të cilën ajo rregull vlen
- Rregullat përbehen nga një ose në shumë selektorë që përcillen nga nj bllok deklarimi në kllapa gjarpërore {}
- Selectorët na mundësojnë që të aplikojnë stilet në elementet e një tipi të caktuar ose atributi
- Blloku deklarues përbëhet prej një ose më shume deklaratave, secila prej të cilave përfshin emrin e atributit përcjellur nga dy pika (:), vlera dhe pikëpresja (;)
- Në shembullin e marrë, rregulla @keyframes përfshin pesë selektorë që përfaqsojnë pikat kohore për animacionin tonë
- Animacioni mund të ndahet në sado pika që dëshirojmë



Tranzicionet dhe Transformimet

- Me tranzicione, mund të ndryshojmë stilin e një elementi gjatë një kohëzgjatje
- Transformimet na lejojnë të lëvizim, rrotullojmë, përshkallëzojmë dhe shtrembërojmë elementet
- Tranzicionet janë të ngjajshme me animacionet por ato na lejojnë të specifikojmë vetëm vlerat fillestare dhe përfundimtare të atyre attributeve që ndryshojnë
- Për ndryshim nga animacionet ku kemi nën kontroll gjendjet gjatë gjithë kohës së animacionit



Tranzicionet dhe Transformimet

- Shembulli në vijim përdor atributet transition dhe transform për të përshkallëzuar dhe rotulluar një imazh për 360 shkallë kur kursori vendosen mbi të
- Fillojmë me definimin e tranzicionit. Për secilin atribut që do të ndryshojë, tranzicioni specifikon kohëzgjatjen e atij ndryshimi
- Me presje ndajmë atributet të cilat do të ndryshojnë dhe kohëzgjatjet individuale të secilit ndryshim
- Për shembull:
 - transition: transform 4s, opacity 2s;
- Tregon që një transformim zgjat katër sekonda dhe patejdukshmëria (opacity) ndryshon për dy sekonda, që d.m.th. që transformimi do të vazhdojë edhe për dy sekonda pasi që ndryshimi në patejdukshmëri ka përfunduar
- Në këtë shembull kemi definuar transformim vetëm kur kursori vendoset mbi imazh

Shembull

a)



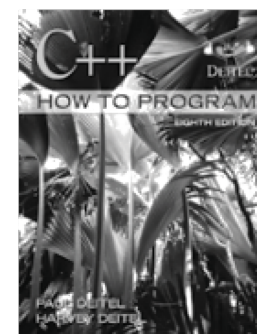
b)



c)

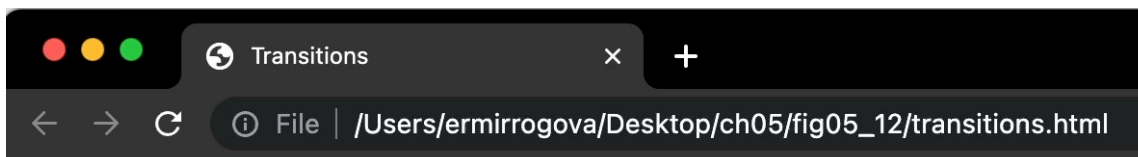


d)





Shembull



Shembull

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <title>Transitions</title>
    <style type = "text/css">
      img
      {
        margin: 80px;
        transition: transform 1s;
      }
      img:hover
      {
        transform: rotate(360deg) scale(2, 2);
      }
    </style>
  </head>
  <body>
    <img src = "cpphttp.png" width = "76" height = "100"
      alt = "C++ How to Program book cover">
  </body>
</html>
```



Tranzicionet dhe Transformimet

- Përdorim pseudo klasën :hover për të filluar rrotullimin dhe përshkallëzimin e imazhit
- Atributi transform specifikon që imazhi do të rrotullohet për 360 shkallë dhe do të rritet për dy herë kur mausi të vendoset mbi imazh
- Për të kryer transformimet, atributi transform përdor funksionet transformuese si rotate (rrotullo) and scale (përshkallëzo)
- Funksioni rotate pranon numër të shkallëve. Vlerat negative shkaktojnë rrotullim në të majtë
- Funksioni scale specifikon si të përshkallëzohet lartësia dhe gjërësia . Vlera 1 paraqet madhësinë origjinale, prandaj vlerat mbi 1 rrisin imazhin, kurse ato nën 1 zvoglojnë atë

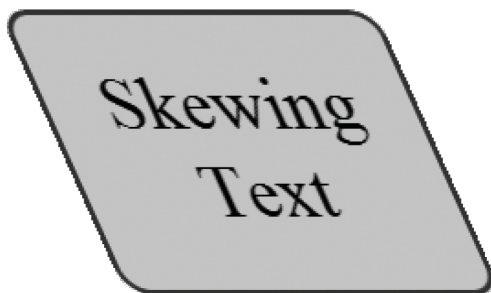


Shtrembërimi

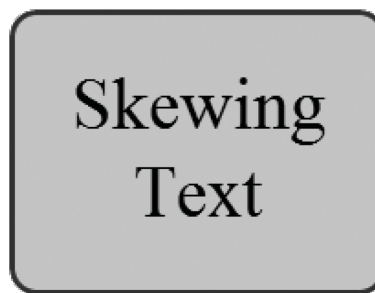
- Transformimet na lejojnë edhe të shtrembërojmë horizontalisht (skewX) apo vertikalisht (skewY)
- Në shembullin në vijim përdorim atributet animation dhe transform për të shtrembëruar horizontalisht për 45 shkallë një drejtkëndësh që përmban tekst
- Fillimisht krijojmë një drejtkëndësh me sfond të gjelbërt të hapur, me kufi me ngjyrë të gjelbërt të mbyllur dhe me kënde të rrumbullaksuara
- Atributi animation specifikon që elementi do të shtrembërohet gjatë një intervali prej 3 sekondash për kohë të pacaktuar (infinite)
- Vlera e katërt, linear, është mënyra e lëvizjes
- Pastaj përdorim rregullën @keyframes dhe selektorët për të specifikuar këndin e shtrembërimit në intervalet e caktuara

Shembull

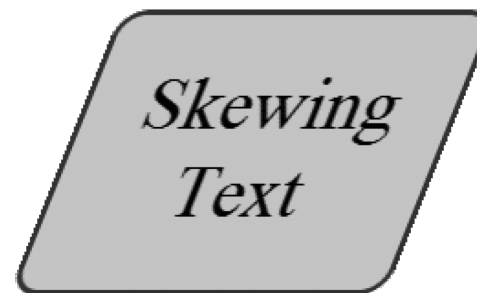
a) Bordered div at skewed left position



b) Bordered div at centered position

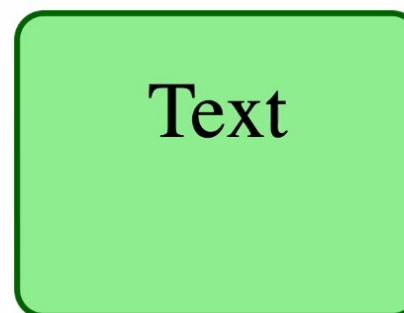
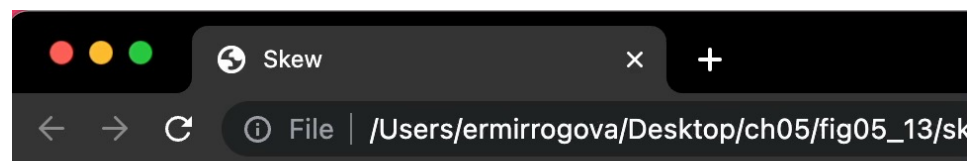


c) Bordered div at skewed right position



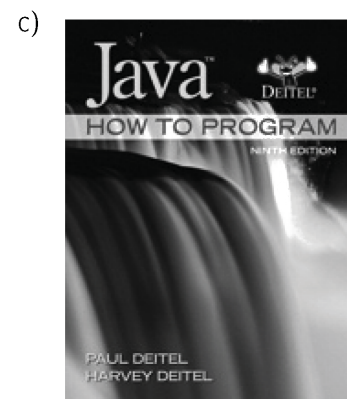
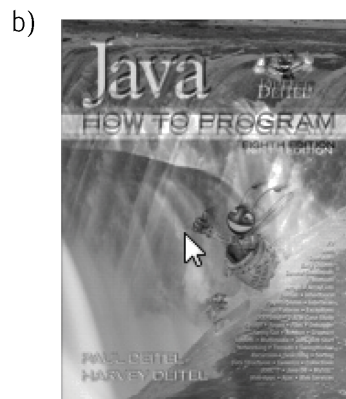
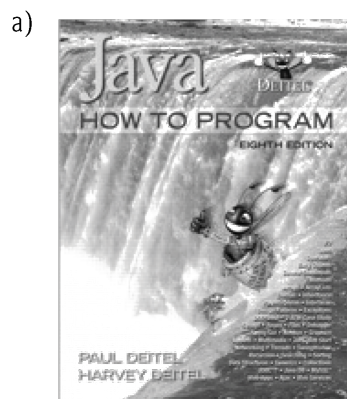
Shembull

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <title>Skew</title>
    <style type = "text/css">
      .textbox
      {
        margin-left: 75px;
        background: lightgreen;
        height: 100px;
        width: 200px;
        padding: 25px 0;
        text-align: center;
        font-size: 250%;
        border: 3px solid DarkGreen;
        border-radius:15px;
        animation: skew 3s infinite ease;
      }
      @keyframes skew
      {
        from {transform: skewX(0deg); }
        25% {transform: skewX(45deg); }
        50% {transform: skewX(0); }
        75% {transform: skewX(-45deg); }
        to {transform: skewX(0); }
      }
    </style>
  </head>
  <body>
    <div class = "textbox">Text</div>
  </body>
</html>
```



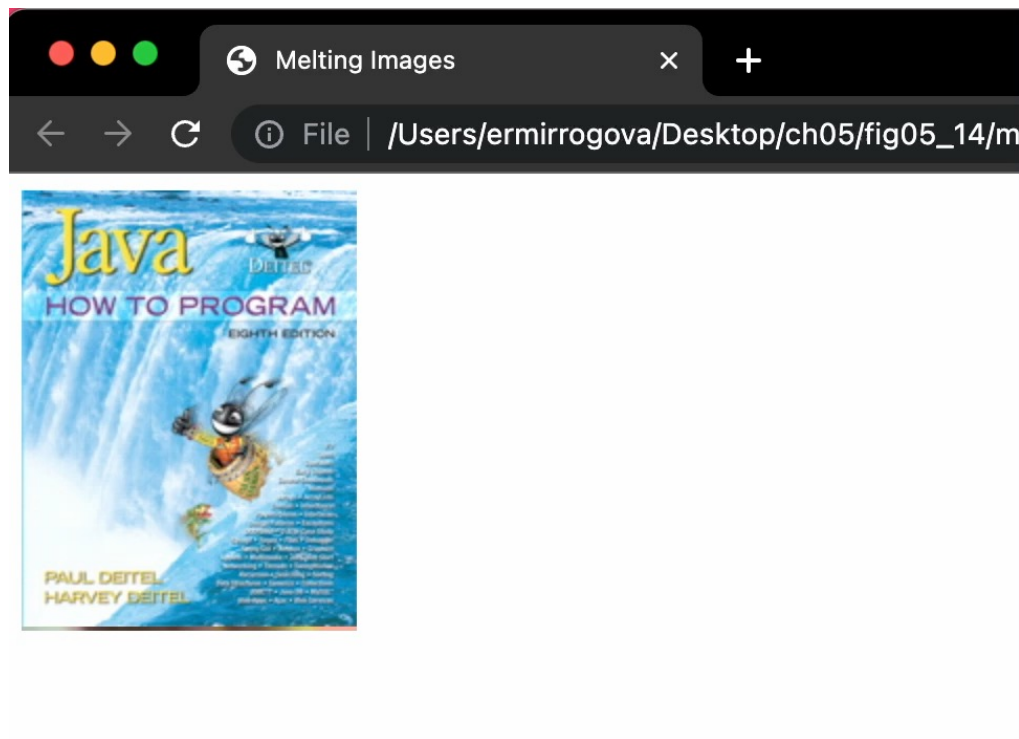
Tranzicioni ndërmjet imazheve

- Në shembullin në vijim përdoret atributi transition për të krijuar efektin e shkërrijes të një imazhi në një tjetër kur vendoset mausi përbi të.



Shembull

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <title>Melting Images</title>
    <style type = "text/css">
      #cover
      {
        position: relative;
        margin: 0 auto;
      }
      #cover img
      {
        position: absolute;
        left: 0;
        transition: opacity 2s ease-in-out;
      }
      #cover img.top:hover
      { opacity:0; }
    </style>
  </head>
  <body>
    <div id= "cover">
      <img class = "bottom" src = "jhtp.png" alt = "Java 9e cover">
      <img class = "top" src = "jhtp8.png" alt = "Java 8e cover">
    </div>
  </body>
</html>
```





5.16 Multicolumn Layout

- CSS3 na mundëson që të krijojmë shtrirje të tekstit me shumë kolona
- Shembulli në vijim paraqet një shtrirje me tri kolona duke dhënë vlerën 3 atributit `column-count`, dhe 30px atributit `column-gap` (hapsira ndërmjet kolonave)
- Me atributin `column-rule` vendosim një linjë të zezë ndërmjet kolonave

Shembull

The screenshot shows a web browser window with the following details:

- Browser: Multicolumns
- Address bar: /Users/ermirrogoval/Desktop/ch05/fig05_17/multicolumns.html
- Page Title: Computers, Hardware and Software

The document content is as follows:

Computers, Hardware and Software

A computer is a device that can perform computations and make logical decisions phenomenally faster than human beings can. Many of today's personal computers can perform billions of calculations in one second — more than a human can perform in a lifetime. Supercomputers are already performing thousands of trillions (quadrillions) of instructions per second! To put that in perspective, a quadrillion-instruction-per-second computer can perform in one second more than 100,000 calculations for every person on the planet! And—these "upper limits" are growing quickly!

Computers process data under the control of sets of instructions called computer programs. These programs guide the computer through orderly sets of actions specified by people called computer

programmers. The programs that run on a computer are referred to as software. In this book, you'll learn today's key programming methodology that's enhancing programmer productivity, thereby reducing software-development costs—object-oriented programming.

A computer consists of various devices referred to as hardware (e.g., the keyboard, screen, mouse, hard disks, memory, DVDs and processing units). Computing costs are dropping dramatically, owing to rapid developments in hardware and software technologies. Computers that might have filled large rooms and cost millions of dollars decades ago are now inscribed on silicon chips smaller than a fingernail, costing perhaps a few dollars each. Ironically, silicon is one of the most abundant materials—it's an

ingredient in common sand. Silicon-chip technology has made computing so economical that more than a billion general-purpose computers are in use worldwide, and this is expected to double in the next few years.

Computer chips (microprocessors) control countless devices. These embedded systems include anti-lock brakes in cars, navigation systems, smart home appliances, home security systems, cell phones and smartphones, robots, intelligent traffic intersections, collision avoidance systems, video game controllers and more. The vast majority of the microprocessors produced each year are embedded in devices other than general-purpose computers.

© 2012 by Pearson Education, Inc. All Rights Reserved.



Shembull

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <title>Multicolumns</title>
    <style type = "text/css">
      p
      { margin:0.9em 0em; }
      .multicolumns
      {
        column-count: 3;
        column-gap: 50px;
        column-rule: 2px outset blue;
      }
    </style>
  </head>
  <body>
    <header>
      <h1>Computers, Hardware and Software</h1>
    </header>
    <div class = "multicolumns">
      <p>A computer is a device that can perform computations and make logical decisions phenomenally faster than human beings can. Ma
      <p>Computers process data under the control of sets of instructions called computer programs. These programs guide the computer
      <p>A computer consists of various devices referred to as hardware (e.g., the keyboard, screen, mouse, hard disks, memory, DVDs a
      <p>Computer chips (microprocessors) control countless devices. These embedded systems include anti-lock brakes in cars, navigati
    <footer>
      <em>&copy; 2012 by Pearson Education, Inc.
      All Rights Reserved.</em>
    </footer>
  </div>
</body>
</html>
```



Media Queries

- Me CSS3 mund të përcaktojmë dhe atributet më të detalizuara të mediumit ku shfrytëzuesi e shikon faqen, si lartësia dhe gjërësia e fushës së shikimit
- Në këtë mënyrë sigurojmë prezantim më të përshtatshëm
- Shembulli në vijim modifikon shembullin e kaluar duke ndryshuar numrin e kolonave bazuar në rezolucionin e monitorit ku paraqitet faqja

Shembull

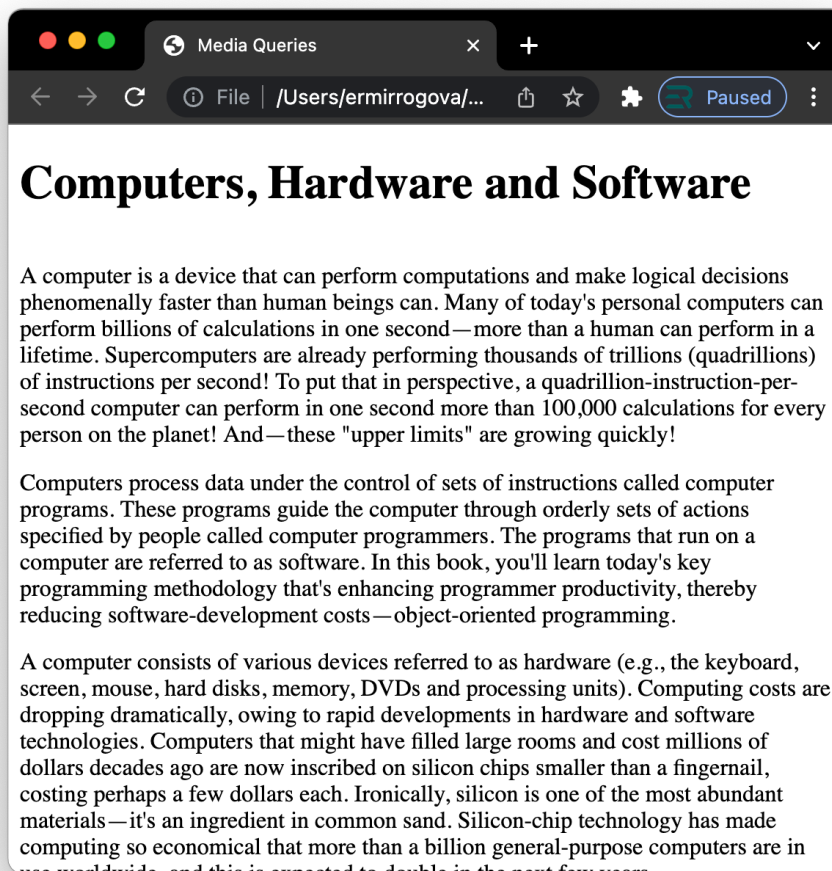
```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <title>Media Queries</title>
    <style type = "text/css">
      p { margin: 0.9em 0em; }
      /* styles for smartphones with screen widths 580px or smaller */
      @media handheld and (max-width: 580px), screen and (max-device-width: 580px), screen and (max-width: 580px)
      {
        div {column-count: 1; }
      }
      /* styles for devices with screen widths of 581px to 1024px */
      @media only screen and (min-width: 581px) and (max-width: 1024px)
      {
        div {
          column-count: 2;
          column-gap: 30px;
          column-rule: 1px outset black;
        }
      }
      /* styles for devices with screen widths of 1025px or greater */
      @media only screen and (min-width: 1025px)
      {
        div {
          column-count: 3;
          column-gap: 30px;
          column-rule: 1px outset black;
        }
      }
    </style>
  </head>
```



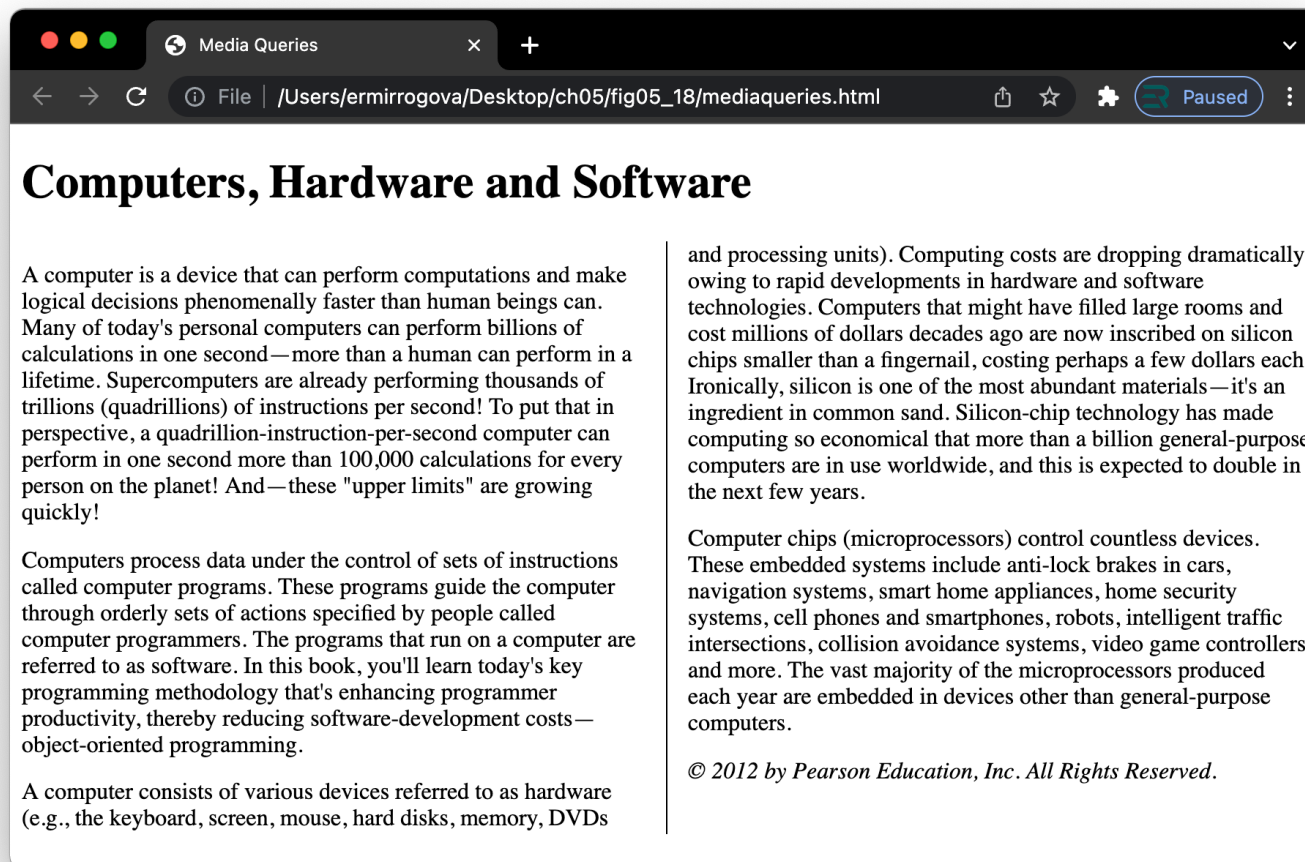

Shembull

```
<body>
  <header>
    <h1>Computers, Hardware and Software</h1>
  </header>
  <div>
    <p>A computer is a device that can perform computations and make logical decisions phenomenally faster than human beings can. Many of today's personal computers can perform billions of calculations in one second&mdash;more than a human can perform in a lifetime. Supercomputers are already performing thousands of trillions (quadrillions) of instructions per second! To put that in perspective, a quadrillion&dash;instruction&dash;per&dash;second computer can perform in one second more than 100,000 calculations for every person on the planet! And&mdash;these "upper limits" are growing quickly!</p>
    <p>Computers process data under the control of sets of instructions called computer programs. These programs guide the computer through orderly sets of actions specified by people called computer programmers. The programs that run on a computer are referred to as software. In this book, you'll learn today's key programming methodology that's enhancing programmer productivity, thereby reducing software&dash;development costs&mdash;object&dash;oriented programming.</p>
    <p>A computer consists of various devices referred to as hardware (e.g., the keyboard, screen, mouse, hard disks, memory, DVDs and processing units). Computing costs are dropping dramatically, owing to rapid developments in hardware and software technologies. Computers that might have filled large rooms and cost millions of dollars decades ago are now inscribed on silicon chips smaller than a fingernail, costing perhaps a few dollars each. Ironically, silicon is one of the most abundant materials&mdash;it's an ingredient in common sand. Silicon&dash;chip technology has made computing so economical that more than a billion general&dash;purpose computers are in use worldwide, and this is expected to double in the next few years.</p>
    <p>Computer chips (microprocessors) control countless devices. These embedded systems include anti&dash;lock brakes in cars, navigation systems, smart home appliances, home security systems, cell phones and smartphones, robots, intelligent traffic intersections, collision avoidance systems, video game controllers and more. The vast majority of the microprocessors produced each year are embedded in devices other than general&dash;purpose computers.</p>
  </div>
  <em>&copy; 2012 by Pearson Education, Inc.
    All Rights Reserved.</em>
</body>
</html>
```

Shembull



Shembull



The screenshot shows a web browser window with the title 'Media Queries' and the URL '/Users/ermirrogoval/Desktop/ch05/fig05_18/mediaqueries.html'. The page content is as follows:

Computers, Hardware and Software

A computer is a device that can perform computations and make logical decisions phenomenally faster than human beings can. Many of today's personal computers can perform billions of calculations in one second—more than a human can perform in a lifetime. Supercomputers are already performing thousands of trillions (quadrillions) of instructions per second! To put that in perspective, a quadrillion-instruction-per-second computer can perform in one second more than 100,000 calculations for every person on the planet! And—these "upper limits" are growing quickly!

Computers process data under the control of sets of instructions called computer programs. These programs guide the computer through orderly sets of actions specified by people called computer programmers. The programs that run on a computer are referred to as software. In this book, you'll learn today's key programming methodology that's enhancing programmer productivity, thereby reducing software-development costs—object-oriented programming.

A computer consists of various devices referred to as hardware (e.g., the keyboard, screen, mouse, hard disks, memory, DVDs

and processing units). Computing costs are dropping dramatically, owing to rapid developments in hardware and software technologies. Computers that might have filled large rooms and cost millions of dollars decades ago are now inscribed on silicon chips smaller than a fingernail, costing perhaps a few dollars each. Ironically, silicon is one of the most abundant materials—it's an ingredient in common sand. Silicon-chip technology has made computing so economical that more than a billion general-purpose computers are in use worldwide, and this is expected to double in the next few years.

Computer chips (microprocessors) control countless devices. These embedded systems include anti-lock brakes in cars, navigation systems, smart home appliances, home security systems, cell phones and smartphones, robots, intelligent traffic intersections, collision avoidance systems, video game controllers and more. The vast majority of the microprocessors produced each year are embedded in devices other than general-purpose computers.

© 2012 by Pearson Education, Inc. All Rights Reserved.

Shembull

The screenshot shows a web browser window with the title 'Media Queries' and the URL `/Users/ermirrogoval/Desktop/ch05/fig05_18/mediaqueries.html`. The page content is as follows:

Computers, Hardware and Software

A computer is a device that can perform computations and make logical decisions phenomenally faster than human beings can. Many of today's personal computers can perform billions of calculations in one second—more than a human can perform in a lifetime. Supercomputers are already performing thousands of trillions (quadrillions) of instructions per second! To put that in perspective, a quadrillion-instruction-per-second computer can perform in one second more than 100,000 calculations for every person on the planet! And—these "upper limits" are growing quickly!

Computers process data under the control of sets of instructions called computer programs. These programs guide the computer through orderly sets of actions

specified by people called computer programmers. The programs that run on a computer are referred to as software. In this book, you'll learn today's key programming methodology that's enhancing programmer productivity, thereby reducing software-development costs—object-oriented programming.

A computer consists of various devices referred to as hardware (e.g., the keyboard, screen, mouse, hard disks, memory, DVDs and processing units). Computing costs are dropping dramatically, owing to rapid developments in hardware and software technologies. Computers that might have filled large rooms and cost millions of dollars decades ago are now inscribed on silicon chips smaller than a fingernail, costing perhaps a few dollars each. Ironically, silicon is one of the most abundant materials—

it's an ingredient in common sand. Silicon-chip technology has made computing so economical that more than a billion general-purpose computers are in use worldwide, and this is expected to double in the next few years.

Computer chips (microprocessors) control countless devices. These embedded systems include anti-lock brakes in cars, navigation systems, smart home appliances, home security systems, cell phones and smartphones, robots, intelligent traffic intersections, collision avoidance systems, video game controllers and more. The vast majority of the microprocessors produced each year are embedded in devices other than general-purpose computers.

© 2012 by Pearson Education, Inc. All Rights Reserved.



@media

- Rregulla @media përdoret për të specifikuar që:
 - Në monitorët me rezolucion horizontal deri në 580px, teksti të paraqitet në një kolonë
 - Në monitorët me rezolucion horizontal prej 581px deri në 1024px teksti të paraqitet në dy kolona
 - Në monitorët me rezolucion horizontal mbi 1024px teksti të paraqitet në tri kolona



Pyetje???