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| JAVA – Constructor Overloading  [2022] |  |
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| [29.08.2022]  Techno India College of Technology  Authored by: Abu Taha Md Farhad  Roll: 31401221052  Reg No: 213141001210016 OF 2021-22  Stream: BCA 2nd year  Subject: Object Oriented Programming [BCAC391] |  |

# Write a program in Java to demonstrate the Constructor Overloading feature of an Object Oriented Programming Language:

## Domelement.java:

import java.util.Arrays;  
import java.util.stream.Collectors;  
  
public class Domelement {  
 private final String tag;  
 private final String content;  
 protected boolean style;  
 protected int width;  
 protected int height;  
  
 protected int borderTop;  
 protected int borderRight;  
 protected int borderBottom;  
 protected int borderLeft;  
  
  
 Domelement(String t){  
 tag = t;  
 content = "";  
 }  
 Domelement(String t, String c){  
 tag = t;  
 content = c;  
 }  
  
 String dom() {  
 String temp\_style = style? " style=\"width: "+width+"px; " +  
 "height: "+height+"px; " +  
 "border-top: "+borderTop+"px; " +  
 "border-right: "+borderRight+"px; " +  
 "border-bottom: "+borderBottom+"px; " +  
 "border-left: "+borderLeft+"px;\"" : "";  
  
 String temp\_content = Arrays.*stream*(content.split("\n"))  
 .collect(Collectors.*joining*("\n\t"));  
 return "<"+tag+temp\_style+">\n\t"+temp\_content+"\n</"+tag+">\n";  
 }  
}

## Style\_css\_border.java:

public class Style\_css\_border {  
  
 Style\_css\_border(Domelement d) {  
 d.borderTop = 1;  
 d.borderRight = 1;  
 d.borderBottom = 1;  
 d.borderLeft = 1;  
 d.style = true;  
 }  
 Style\_css\_border(Domelement d, int trbl) {  
 d.borderTop = trbl;  
 d.borderRight = trbl;  
 d.borderBottom = trbl;  
 d.borderLeft = trbl;  
 d.style = true;  
 }  
 Style\_css\_border(Domelement d, int tb, int rl) {  
 d.borderTop = tb;  
 d.borderRight = rl;  
 d.borderBottom = tb;  
 d.borderLeft = rl;  
 d.style = true;  
 }  
 Style\_css\_border(Domelement d, int t, int r, int b, int l) {  
 d.borderTop = t;  
 d.borderRight = r;  
 d.borderBottom = b;  
 d.borderLeft = l;  
 d.style = true;  
 }  
  
}

## Style\_css\_width.java:

public class Style\_css\_width {  
 Style\_css\_width(Domelement d, int w){  
 d.width = w;  
 d.style = true;  
 }  
}

## Style\_css\_height.java:

public class Style\_css\_height {  
 Style\_css\_height(Domelement d, int h){  
 d.height = h;  
 d.style = true;  
 }  
}

## Html.java:

public class Html {  
 public static Domelement *html*, *head*, *body*, *title*, *div1*, *div2*, *div3*, *span1*;  
 Html() {  
 *div1* = new Domelement("div", "i am div1.");  
 new Style\_css\_border(*div1*, 5); *// overloaded constructor to set all side*

*// border as 5px* new Style\_css\_width(*div1*, 100);  
 new Style\_css\_height(*div1*, 100);  
  
 *div2* = new Domelement("div", "i am div2.");  
 new Style\_css\_border(*div2*, 5, 10); *// overloaded constructor to set border*

*// of top, bottom as 5px  
 // and right, left as 10px  
  
 div3* = new Domelement("div", "i am div3.");  
 new Style\_css\_border(*div3*, 2, 4, 8, 10); *// overloaded constructor to set*

*// all different border width of*

*// all side  
  
 span1* = new Domelement("span");  
 new Style\_css\_border(*span1*); *// default overloaded constructor to set all*

*// side border as 1px* new Style\_css\_width(*div1*, 500);  
 new Style\_css\_height(*div1*, 200);  
  
 *title* = new Domelement("title", "This is title");  
  
 *head* = new Domelement("head", *title*.dom());  
 *body* = new Domelement("body", *div1*.dom() + *div2*.dom() + *div3*.dom()

+ *span1*.dom());  
 *html* = new Domelement("html", *head*.dom() + *body*.dom());  
 }  
  
}

Main.java:

public class Main {  
 public static void main(String[] args) {  
 new Html();  
 System.*out*.println(Html.*html*.dom());  
 }  
}

## Output:

### House

Farhad ~ >> javac Main.java

Farhad ~ >> java Main

<html>

<head>

<title>

This is title

</title>

</head>

<body>

<div style="width: 500px; height: 200px; border-top: 5px; border-right: 5px; border-bottom: 5px; border-left: 5px;">

i am div1.

</div>

<div style="width: 0px; height: 0px; border-top: 5px; border-right: 10px; border-bottom: 5px; border-left: 10px;">

i am div2.

</div>

<div style="width: 0px; height: 0px; border-top: 2px; border-right: 4px; border-bottom: 8px; border-left: 10px;">

i am div3.

</div>

<span style="width: 0px; height: 0px; border-top: 1px; border-right: 1px; border-bottom: 1px; border-left: 1px;">

</span>

</body>

</html>

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# Github repository link:

<https://github.com/Farhad618/html-dom-prototype.git>

Thank You