

CISC124 – Today’s Topics		
<ul style="list-style-type: none"> <li>• Quiz 1</li> <li>• More on accessor and mutator methods</li> <li>• Type casting</li> </ul>		
Winter 2019	F. de la Parra	1

•1

Quiz 1		
<p>Location and Hours:</p> <ul style="list-style-type: none"> <li>• Quiz 1 will be written in Jeffery 155, at the beginning of your lab session</li> <li>• Mon Jan 28, 9:30 am – 10:30 am</li> <li>• Mon Jan 28, 2:30 pm – 3:30 pm</li> <li>• Tue Jan 29, 8:30 am – 9:30 am</li> <li>• Wed Jan 30, 2:30 pm – 3:30 pm</li> </ul> <p>Format:</p> <ul style="list-style-type: none"> <li>• One coding question (i.e., write a method)</li> <li>• A set of multiple choice questions</li> </ul>		
Winter 2019	F. de la Parra	2

•2

Quiz 1		
<p>Topics (Everything covered until Jan 25) :</p> <ul style="list-style-type: none"> <li>• Java environment basics (tools, libraries, development cycle)</li> <li>• Basic structure of java programs</li> <li>• Console I/O. Formatted console output</li> <li>• Class declaration and members</li> <li>• Visibility and storage modifiers (public, static, final, etc.)</li> <li>• Primitive and class types</li> <li>• Expressions. Operators</li> <li>• Arrays (1D) of primitive and class types</li> <li>• Branch and loop statements: if-else, switch, while, for</li> <li>• Encapsulation. Accessor and mutator methods</li> <li>• Type casting</li> </ul>		
Winter 2019	F. de la Parra	3

•3

More on Accessors and Mutators		
<ul style="list-style-type: none"> <li>• In general, accessor methods can <b>access one or more attributes</b> in one invocation</li> <li>• An accessor method can <b>do some processing</b> with the <b>attributes</b> accessed and return a derived value(s)                             <ul style="list-style-type: none"> <li>• Examples: compute an average, upper-case or concatenate string attributes, etc.</li> </ul> </li> <li>• In general, mutator methods can <b>take one or more arguments</b> in one invocation</li> <li>• A mutator method can <b>do some processing</b> with the <b>arguments</b> passed to it and update one or more attributes                             <ul style="list-style-type: none"> <li>• Examples: check that arguments are in valid ranges, check that arguments will not make attributes to produce invalid future operations</li> </ul> </li> </ul>		
Winter 2019	F. de la Parra	4

•4

Type casting		
<ul style="list-style-type: none"> <li>• Type casting operation converts a value of a given type into a value in a different type</li> <li>• In some situations casting affects the intended value of a variable in a different type.</li> <li>• Implicit → <code>float var1 = 1 * 2 * 3 + 3.1415f;</code></li> <li>• Explicit → <code>float var2 = 10/float(3);</code></li> <li>• Automatic type coercion → <code>float var3 = 10;</code></li> <li>• Illegal attempt of type coercion → <code>int var4 = 4.5;</code> (Needs explicit casting → <code>int var4 = (int)4.5;</code> var4 is assigned a 4)</li> <li>• Cannot cast class types to primitive types</li> </ul>		
Winter 2019	F. de la Parra	5

•5