

**Subject/Course:** Java Programming  
**Grade Level:** Grade 11 – ICS 3M  
**Topic:** AWT components - events

**Name:** Jennifer Goldik  
**Date:** November 20, 2003  
**Time:** 9:35 am – 10:55 am

## 1. Instructional Expectations and Opportunities

The Grade 11 learners will:

### a) Expectations:

- Review the AWT components covered yesterday (buttons, textfields, textareas, labels), and go over the problems that some students encountered. Introduce the events for the components covered yesterday. The students will be able to write code for the event of the user clicking on a button.

### b) Opportunities:

- Review the AWT components covered yesterday, as well as reviewing methods needed for creating the events.

## 2. Pre-Assessment

### a) Learners:

- The class (9 students) have covered the basics of applets up to this point, as well as the basics of drawing within an applet. The students should also understand the concept of methods. They learned the basics of AWT components yesterday, and should have some idea of how to add the components to their applet.

### b) Learning Environment:

- There are about 24 computers in this classroom, as well as desks in the center of the room. For the lessons I will have the students in their desks, but most of the time will be spent at the computers where they can get hands on experience.

### c) Resources:

- The students use online textbooks and online notes to complete their assignments. All of these resources are linked off of the schools website. I will also have the photocopies from the DDC text book ready, as there are two assignments in it.
- I will have the DDC book with me in case anyone finishes the assigned work, as there is an "If You Have Time..." section on page 143 the students can complete
- I will also be using AWT Events.ppt in the resources folder.

3. Content	4. Strategies
<p><b>a) Introduction:</b> (3 mins)</p> <ul style="list-style-type: none"> <li>Show the darts game (<a href="http://www.xpressive.com/olddarts/xpress.class">http://www.xpressive.com/olddarts/xpress.class</a>) and explain how it is completely powered by events</li> </ul>	<p><b>a) Teaching Strategies:</b></p> <ul style="list-style-type: none"> <li>Explain how this is similar to what they will be creating in their final project</li> <li>Show mine with the layout line commented out</li> <li>Show where I've set the properties</li> <li>Emphasize that variables must be declared outside the init() so they can be accessed by all methods</li> <li>Start the AWT Events PowerPoint</li> <li>Show the slide with the flowchart on it</li> <li>Show code sample for actionPerformed event from Applet_Tutorial2 from the website used yesterday</li> <li>Show the slide with the basics</li> <li>Have a slide with fill in the blanks</li> <li>Go through each line to ensure the students understand the code</li> <li>Turn the lights back on and hand out the booklets</li> </ul>
<p><b>b) Establish the Learning:</b> (5 mins)</p> <ul style="list-style-type: none"> <li>Talk about the errors that happened yesterday when creating their assignments.</li> <li>Review basic layout of the code in an AWT program</li> </ul> <p style="text-align: right;">(5 mins)</p> <ul style="list-style-type: none"> <li>Explain where components and events fit into the AWT class</li> <li>Explain the terminology: event, event source, and event listener</li> <li>When is each of the above called, and by what</li> <li>There are so many events, so we're going to focus on just one today</li> <li>What sort of events did we see yesterday in the samples we looked at?</li> </ul> <p style="text-align: right;">(10 mins)</p> <ul style="list-style-type: none"> <li>Explain the basic changes from what they have done before: <ul style="list-style-type: none"> <li>Import java.awt.event.*</li> <li>Implements action listener</li> <li>Method for actionPerformed() under the init() method</li> </ul> </li> <li>Questions them on these changes</li> <li>Go through Applet_Tutorial2 and explain what the different codes do</li> </ul> <p style="text-align: right;">(2 mins)</p> <ul style="list-style-type: none"> <li>Explain what assignment 11-1 is looking for, and answer any questions</li> </ul>	

#### 4. Strategies (cont'd)

##### b) Consolidation of Learning:

- By having the students go to the computers and apply this right away, it will reinforce what they have learned. These concepts will be reviewed again next week when I teach the next event listener so they can move on with the next project.

##### c) Application / Reaction:

- The students will apply their learning in the assignments this week which are based on this concept. They will also be able to reinforce this topic when creating their final project. This is directly related to the expectations, as well as the expectations for the final project. I will need to circulate around the room and help the students to complete this and previous projects.

#### 5. Assessment

- Today's work will be assessed using the attached grid, as well as being assessed as part of the students final programming project, and the unit test.

#### 6. Reflections

##### a) Learning Expectations:

##### b) Learning Opportunities:

##### c) Effectiveness:

##### d) Next Step: