

# Solutions to Quick Check Questions

# 14

## Advanced GUI

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### 14.1 Handling Mouse Events

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1. Which listener object listens to mouse movements? Which listener object listens to mouse button presses and clicks?

*The MouseMotionListener listens to mouse movements. The MouseListener listens to mouse button events.*

2. What is the purpose of the isMetaDown method?

*It is used to detect whether the meta-modifier is pressed or not. In the Windows environment, the meta-modifier is equivalent to the pressing of the right mouse button. In the Mac environment, it is equivalent to the pressing of the Command key.*

3. What is the difference between mouseClicked and mousePressed?

*When the mouse button is pressed, mousePressed event occurs. When the mouse button is pressed and then released, mouseClicked event occurs.*

### 14.2 Layout Managers and Panels

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1. How does the flow layout places the components?

*It places the components in left-to-right, top-to-bottom order.*

2. Which layout manager divides the container into grids of equal size?

*The GridLayout layout manager divides the container into grids of equal size.*

3. Write a statement to create a border layout with 20-pixel gaps in both horizontal and vertical directions.

```
BorderLayout boderLayout =new BorderLayout(20, 20);
```

### 14.3 Effective Use of Nested Panels

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No Quick Check questions.

### 14.4 Other GUI Components

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No Quick Check questions.

### 14.5 Sample Development: Tic Tac Toe

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No Quick Check questions.