

EECS1720

Worksheet 6 – Java AWT/Swing Event Handling

- 1) What is an Event?
- 2) How do Events differ from Exceptions?
- 3) How are Events dispatched and handled?
- 4) What is an Inner Class? Why are they useful for Event Handling??

5) What types of Events can we typically detect through interactions with a (GUI) interface?

6) What does the keyword **instanceOf** signify in a java program? How can instanceof be used when a Listener could be directed events from several different types of GUI object?

7) In the context of Swing, How do you link each of the following

- i. Button
- ii. CheckBox
- iii. Radio Button
- iv. Image

to an...

- v. ActionEvent
- vi. MouseEvent
- vii. MouseMotionEvent
- viii. KeyEvent

- 8) What is an Adaptor? Give an example of how an Adaptor can be used.. what is the advantage of using an Adaptor over a Listener?
- 9) In the context of using a set of JRadioButtons, explain how they would first be constructed, then how you would setup a Listener to respond to when they are changed. Assume that when a new JRadioButton is selected, a different message is outputted to the System console (i.e. standard output).
- 10) What does it mean to get the “focus” in a Java Swing application? How does one assign focus to a particular JFrame or a specific JComponent?
- 11) Outline at least two different approaches to setting up a Listener for a KeyEvent
- 12) In the context of KeyEvents, what are “modifiers” ? How can they be accessed?
- 13) How do MouseMotionEvents differ from MouseEvents? How do we process these?