

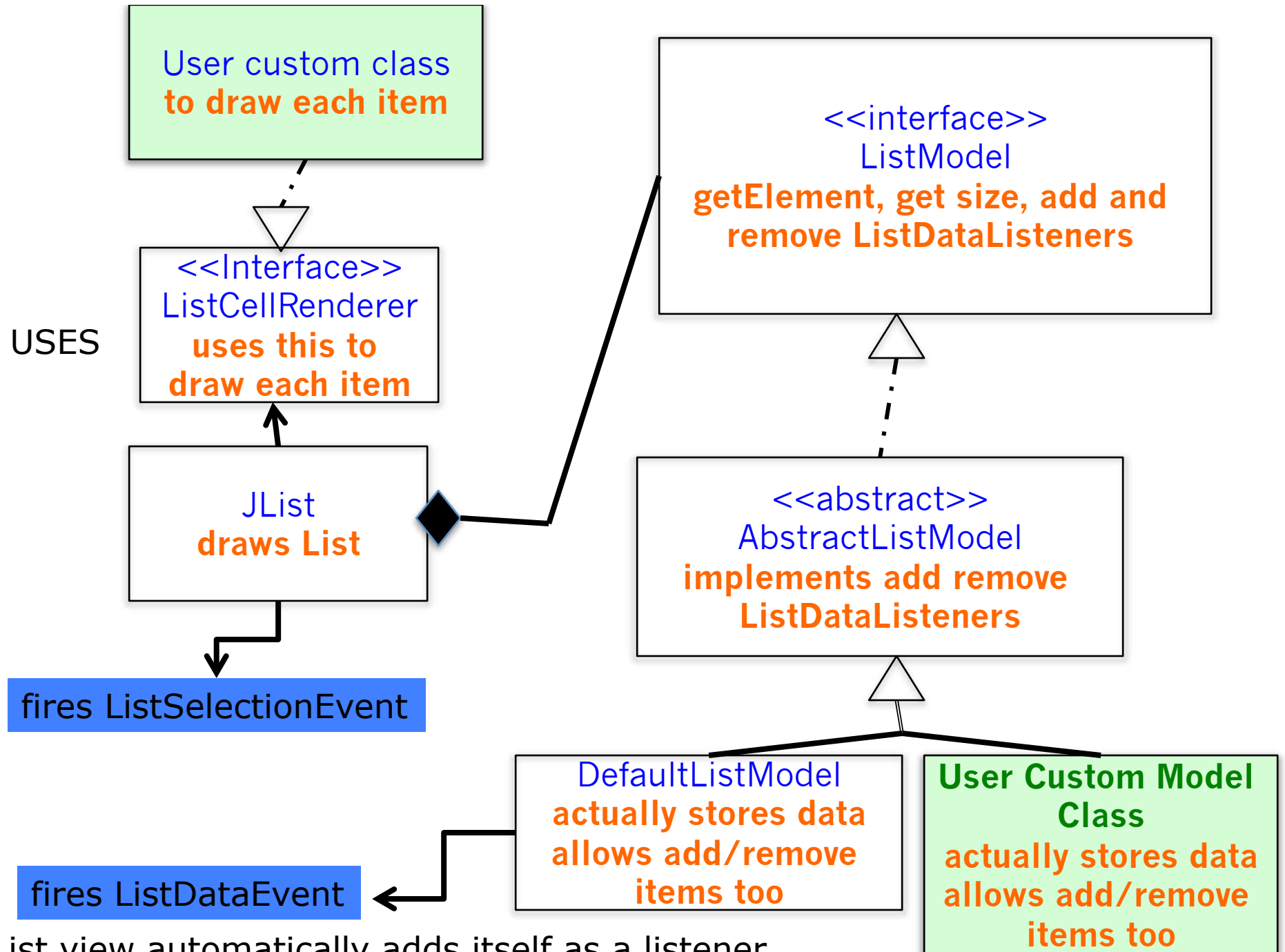
# Java Swing -2

MVC in Swing JList, JTrees, JTables

# MVC use in Java Swing

- Simple Components
  - These combine the Model and the View.
    - Example: JButton
    - Model is state of button (clicked or not)
    - View is how Button shows on screen
- Complex Components
  - These have separate Model and View classes!
  - Developer can create their own Model and View classes for these.
  - Example: JList, JTree, JTable

# JList and JTree

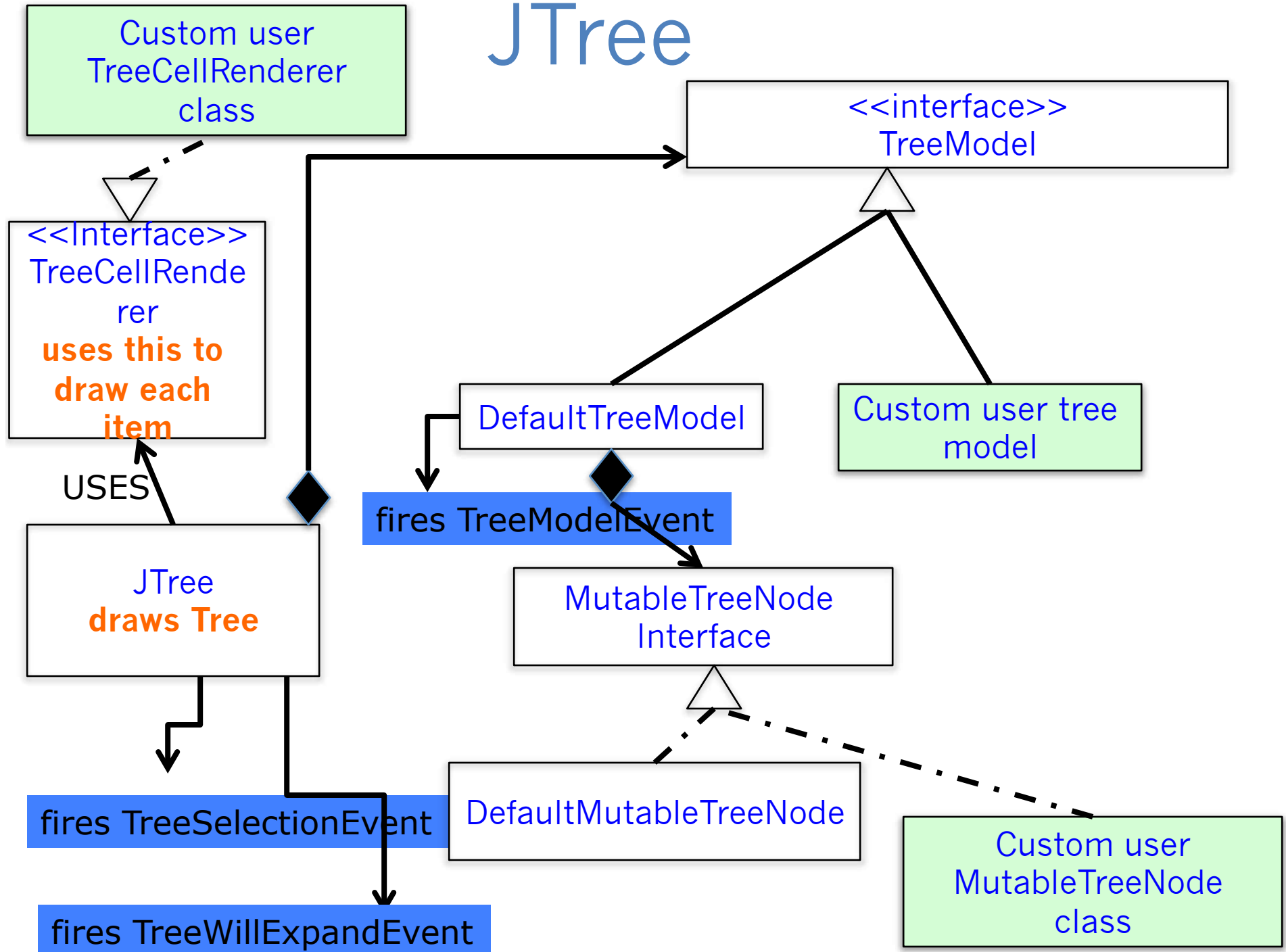


JList view automatically adds itself as a listener  
We can also add other listeners

# JList

- Implement [ListCellRenderer](#) to customize how the list items will display
- You can use the [DefaultListModel](#) to allow easy add/delete of items from JList
- You can also create own customized data model for JList by extending [AbstractListModel](#). This allows you to SYNCHRONIZE your own data structure or file or database with the JList view.

# JTree



# JTree

- There are more types of listeners needed for JTree. Aside from select node, there are also expand/collapse tree node listeners.
- Implement [TreeCellRenderer](#) to customize how the Tree items will display.
- You can use the [DefaultTreeModel](#) and [DefaultMutableTreeNode](#) to allow easy add/delete of items from JTree
- You can also create own customized data model for JTree by implementing [TreeModel](#) and [MutableTreeNode](#) interfaces. This allows you to SYNCHRONIZE your own data structure or file or database with the JTree view.

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