



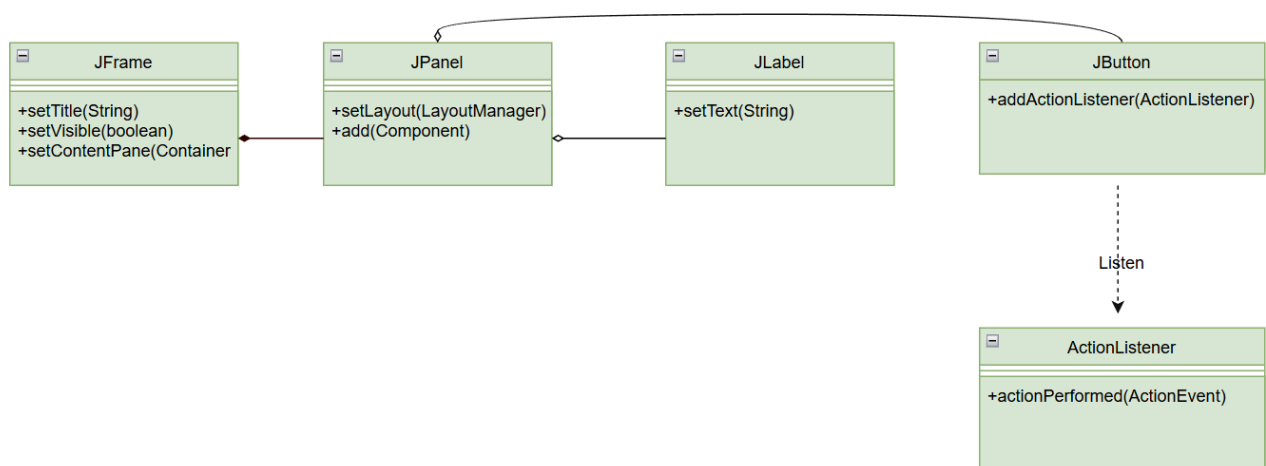
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1.

The java framework known as Java Swing is useful for creating different GUI's. There are different components that can be used. These components are JFrame, JPanel, JLabel, and JButton. These are ultimately used together to create user interaction and forms. The ActionListener takes care of any trigger events such as a mouse being moved or a button being clicked. This allows developers to have a clean and organized code as the java swing package. consistency and room for flexibility. This is because this design separates event handling logic and the user interface which allows for a sustainable code.

Class Diagram:



2. Look through the example code in the GitHub repository and explain how this example implements the MVC pattern. How does it differ from the conventional MVC pattern described in the lectures?

This example uses the MVC architecture to separate different elements: the Model holds data (first and last name), the View creates the Swing user interface, and the Controller connects the two by handling events and modifying the model or view as needed. The MySwingMVCApp class connects them during initialization. It varies from the traditional MVC framework in that there is no observer/observer mechanism. Therefore the controller must manually update the view. Additionally, the view exposes its fundamental Swing components to the controller, resulting in a tighter relationship. Finally, the controller directly attaches listeners to the view's UI components, but in certain MVC implementations, the view manages its own events and sends them upstream in a manner that is less concrete.

3. SEQUENCE DIAGRAM

