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//Add all the boards into View class
JComponent BoardPanel = new BoardView(gameboard);
JComponent AnimatPanel = new AnimationView(gameboard);
JComponent Player1 = new PlayerView(P1board);
JComponent Player2 = new PlayerView(P2board);
JComponent P1cemetery = new PlayerView(P1Cemetery);
JComponent P2cemetery = new PlayerView(P2Cemetery);
JComponent P1SelBoard = new PlayerView(P1SelectedBoard);
JComponent P2SelBoard = new PlayerView(P2SelectedBoard);

//Set card layout, to synthetic all the select board and player board together
cardlayout1 = new CardLayout();
synthetic1 = new JPanel(cardlayout1);
synthetic1.add(Player1, "1");
synthetic1.add(P1SelBoard, "2");

cardlayout2 = new CardLayout();
synthetic2 = new JPanel(cardlayout2);
synthetic2.add(Player2, "1");
synthetic2.add(P2SelBoard, "2");

synthetic3 = new JPanel(cardlayout2);
synthetic3.add(BoardPanel);
synthetic3.add(AnimatPanel);

//add MouseListener to every panel
Player1.addMouseListener(new MouseController(P1board, this));
Player2.addMouseListener(new MouseController(P2board, this));
P1SelBoard.addMouseListener(new MouseController(P1SelectedBoard, this));
P2SelBoard.addMouseListener(new MouseController(P2SelectedBoard, this));
BoardPanel.addMouseListener(new MouseController(gameboard, this));
AnimatPanel.addMouseListener(new MouseController(gameboard, this));
//add key listener for this component
this.addKeyListener(new KeyController(this));

//Use splitPane to glue all the Components together
JSplitPane splitPane1 = new JSplitPane(JSplitPane.VERTICAL_SPLIT, false, synthetic1, P1cemetery);
JSplitPane splitPane2 = new JSplitPane(JSplitPane.VERTICAL_SPLIT, false, synthetic2, P2cemetery);
JSplitPane splitPane3 = new JSplitPane(JSplitPane.HORIZONTAL_SPLIT, false, splitPane1, synthetic3);
JSplitPane splitPane4 = new JSplitPane(JSplitPane.HORIZONTAL_SPLIT, false, splitPane3, splitPane2);

```

This piece of code is to synthetic all the JComponents in to one frame, allows it to swapping and resize. Firstly I add all the boards into the View class which allows the observer to listening to the Observables, and add them into mouseListener witch allows the user to controls all the boards. To implements swapping between panels, I create a JPanel with Card layout, and added the boards into this new JPanel, so when the user active some conditions like double chick on the chess, it will make the card layout swapping to the next panel. After all I used splitPane to make them join together into one Pane. which allows user to make the boards independently resizable.

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185
186     // set BorderLayout for this GUI
187     setLayout(new BorderLayout());
188     add(jToolBar, BorderLayout.NORTH);
189     add(splitPane4, BorderLayout.CENTER);
190     add(textArea, BorderLayout.SOUTH);
191     //set the size
192     setSize(Chess.size * 19, Chess.size * 12);
193     setFocusable(true);
194     setVisible(true);
195     repaint();
```

I used board layout in GUI component to lay out my panel in order, because i think that will be easier for user to using the components. Also I set the default size depends on the Chess size, witches when the player change the size of chess it will changes the size of the window as well, is easy to resizable. lastly, set this GUI to Focusable it allows the user controller to this panel, might make change and play around with.