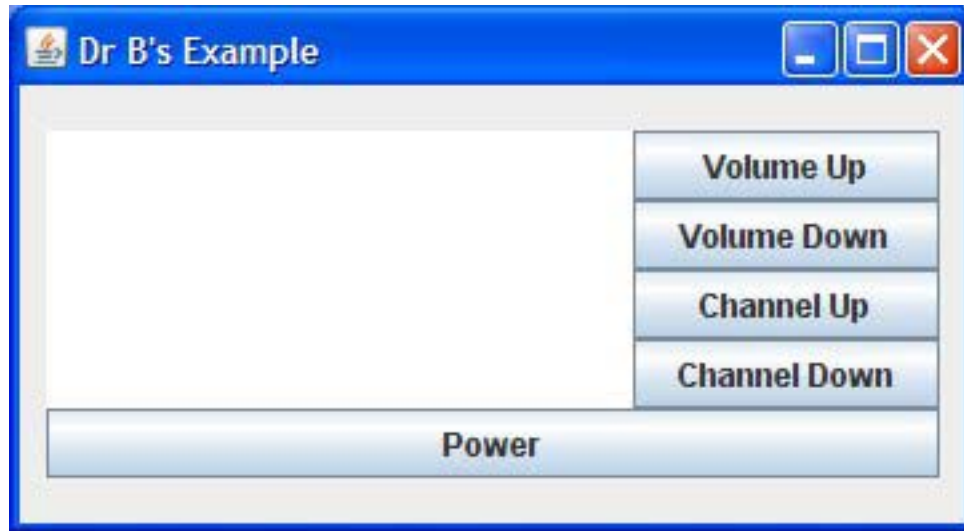


# Gui Design

In this in-class exercise, we will be creating a gui from scratch. Create a file called TV.java and add code so that you can create the following GUI:



- Remember to extend JFrame
- Use the GridBagLayout Manager
  - Advantage
    - Components can be different size and width
    - Can be placed in any order
  - Need a GridBagConstraints object to set the stats, such as x and y, width and height
  - Adding is a little more difficult, I would suggest using the method below
  - Components can take up the entire area or a fill of GridBagConstraints.BOTH
- For the fake TV screen, use a JTextArea of size 6x20

You may want to use the following method:

```
// method to set constraints
private void addComponent( GridBagLayout layout, GridBagConstraints constraints,
                           JFrame frame, Component component,
                           int row, int column,
                           int width, int height,
                           int weightx, int weighty,
                           int fill )
{
    constraints.gridx = column; // set gridx
    constraints.gridy = row; // set gridy
    constraints.gridwidth = width; // set gridwidth
    constraints.gridheight = height; // set gridheight
    constraints.weightx = weightx;
    constraints.weighty = weighty;
    constraints.fill = fill; //Use GridbagConstraints.BOTH probably
    layout.setConstraints( component, constraints ); // set constraints
    frame.add( component ); // add component
}
```