

Repl.it Starter Code for Zoo

Look at the assignment on the main webpage.

Main.java

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import javax.swing.border.*;

public class Main {

    public static void main(String[] args) {

        JFrame frame = new JFrame("Zoo");
        frame.setSize(500, 500);
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        JComponent newContentPane = new Zoo();
        newContentPane.setOpaque(true);
        frame.setContentPane(newContentPane);

        frame.setLocationRelativeTo(null);
        frame.setVisible(true);
    }
}
```

Zoo.java

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import javax.swing.border.*;

public class Zoo extends JPanel implements ActionListener
{
    Panel p_card; //to hold all of the screens
    Panel card1, card2, card3, card4, card5, card6, card7, card8, card9, card10, card11, card12; //the screens
    CardLayout cdLayout = new CardLayout ();

    public Zoo ()
    {
        p_card = new Panel ();
        p_card.setLayout (cdLayout);
        zoogate ();
        chooseWhere ();
        reptileHouse ();
        boa ();
        alligator ();
        smallMammals ();
        wombat ();
        skunk ();
        pangolin ();
        outdoorPens ();
        moose ();
        okapi ();
        setLayout (new BorderLayout ());
        add ("Center", p_card);
    }

    public void zoogate ()
    { //screen 1 is set up.
        card1 = new Panel ();
```

```

card1.setBackground (Color.white);
JLabel title = new JLabel ("Welcome to the zoo!");
title.setFont (new Font ("Arial", Font.PLAIN, 24));
JButton next = new JButton ("Enter");
next.setPreferredSize (new Dimension (400, 50));
next.setActionCommand ("2");
next.addActionListener (this);
card1.add (title);
card1.add (next);
p_card.add ("1", card1);
}

public void chooseWhere ()
{ //screen 2 - pick from the options - is set up.
card2 = new Panel ();
card2.setBackground (Color.white);
JLabel title = new JLabel ("Where do you want to go?");
title.setFont (new Font ("Arial", Font.PLAIN, 24));
JButton rept = new JButton ("Reptile House");
rept.setActionCommand ("3");
rept.addActionListener (this);
rept.setPreferredSize (new Dimension (400, 50));
JButton small = new JButton ("Small Mammals");
small.setActionCommand ("4");
small.addActionListener (this);
small.setPreferredSize (new Dimension (400, 50));
JButton out = new JButton ("Outdoor Pens");
out.setActionCommand ("5");
out.addActionListener (this);
out.setPreferredSize (new Dimension (400, 50));
card2.add (title);
card2.add (rept);
card2.add (small);
card2.add (out);
p_card.add ("2", card2);
}

public void reptileHouse ()
{ //screen 3- the reptile House - is set up.
card3 = new Panel ();
card3.setBackground (Color.white);
JLabel title = new JLabel ("The Reptile House");
title.setFont (new Font ("Arial", Font.PLAIN, 24));
JButton boa = new JButton ("Boa Constrictor");
boa.setActionCommand ("6");
boa.addActionListener (this);
boa.setPreferredSize (new Dimension (400, 50));
JButton ali = new JButton ("Alligator");
ali.setActionCommand ("7");
ali.addActionListener (this);
ali.setPreferredSize (new Dimension (400, 50));
JButton entrance = new JButton ("Back to the entrance");
entrance.setActionCommand ("2");
entrance.addActionListener (this);
entrance.setPreferredSize (new Dimension (400, 50));
card3.add (title);
card3.add (boa);
card3.add (ali);
card3.add (entrance);
p_card.add ("3", card3);
}

public void smallMammals ()
{ //screen 4 - small Mammals - is set up.
card4 = new Panel ();
card4.setBackground (Color.white);
JLabel title = new JLabel ("Small Mammals");
title.setFont (new Font ("Arial", Font.PLAIN, 24));
JButton wombat = new JButton ("Wombat");
wombat.setActionCommand ("8");
wombat.addActionListener (this);
wombat.setPreferredSize (new Dimension (400, 50));
JButton skunk = new JButton ("Skunk");
skunk.setActionCommand ("9");
skunk.addActionListener (this);
skunk.setPreferredSize (new Dimension (400, 50));
JButton pangolin = new JButton ("Pangolin");
pangolin.setActionCommand ("10");
pangolin.addActionListener (this);
pangolin.setPreferredSize (new Dimension (400, 50));
JButton entrance = new JButton ("Back to the entrance");
entrance.setActionCommand ("2");
entrance.addActionListener (this);
entrance.setPreferredSize (new Dimension (400, 50));
card4.add (title);
card4.add (wombat);
card4.add (skunk);
card4.add (pangolin);
card4.add (entrance);
p_card.add ("4", card4);
}

public void outdoorPens ()
{ //screen 5 - the outdoor Pens - is set up.
card5 = new Panel ();
card5.setBackground (Color.white);

```

```

JLabel title = new JLabel ("Outdoor Pens");
title.setFont (new Font ("Arial", Font.PLAIN, 24));
JButton moose = new JButton ("Moose");
moose.setActionCommand ("11");
moose.addActionListener (this);
moose.setPreferredSize (new Dimension (400, 50));
JButton okapi = new JButton ("Okapi");
okapi.setActionCommand ("12");
okapi.addActionListener (this);
okapi.setPreferredSize (new Dimension (400, 50));
JButton entrance = new JButton ("Back to the entrance");
entrance.setActionCommand ("2");
entrance.addActionListener (this);
entrance.setPreferredSize (new Dimension (400, 50));
card5.add (title);
card5.add (moose);
card5.add (okapi);
card5.add (entrance);
p_card.add ("5", card5);
}

public void boa ()
{ //screen 6 - boa - is set up.
card6 = new Panel ();
card6.setBackground (Color.white);
JLabel title = new JLabel ("Boa Constrictor");
title.setFont (new Font ("Arial", Font.PLAIN, 24));
JButton returnBack = new JButton ("Return to Reptile House");
returnBack.setPreferredSize (new Dimension (400, 50));
returnBack.setActionCommand ("3");
returnBack.addActionListener (this);
card6.add (title);
card6.add (returnBack);
p_card.add ("6", card6);
}

public void alligator ()
{ //screen 7 - alligator - is set up.
card7 = new Panel ();
card7.setBackground (Color.white);
JLabel title = new JLabel ("The Alligator");
title.setFont (new Font ("Arial", Font.PLAIN, 24));
JButton returnBack = new JButton ("Return to Reptile House");
returnBack.setPreferredSize (new Dimension (400, 50));
returnBack.setActionCommand ("3");
returnBack.addActionListener (this);
card7.add (title);
card7.add (returnBack);
p_card.add ("7", card7);
}

public void wombat ()
{ //screen 8 - wombat - is set up.
card8 = new Panel ();
card8.setBackground (Color.white);
JLabel title = new JLabel ("Cute Little Wombat");
title.setFont (new Font ("Arial", Font.PLAIN, 24));
JButton returnBack = new JButton ("Return to Small Mammals");
returnBack.setPreferredSize (new Dimension (400, 50));
returnBack.setActionCommand ("4");
returnBack.addActionListener (this);
card8.add (title);
card8.add (returnBack);
p_card.add ("8", card8);
}

public void skunk ()
{ //screen 9 - skunk - is set up.
card9 = new Panel ();
card9.setBackground (Color.white);
JLabel title = new JLabel ("Smelly Skunk");
title.setFont (new Font ("Arial", Font.PLAIN, 24));
card9.add (title);
JButton returnBack = new JButton ("Return to Small Mammals");
returnBack.setPreferredSize (new Dimension (400, 50));
returnBack.setActionCommand ("4");
returnBack.addActionListener (this);
card9.add (title);
card9.add (returnBack);
p_card.add ("9", card9);
}

public void pangolin ()
{ //screen 10 - pangolin - is set up.
card10 = new Panel ();
card10.setBackground (Color.white);
JLabel title = new JLabel ("Adorable Pangolin");
title.setFont (new Font ("Arial", Font.PLAIN, 24));
JButton returnBack = new JButton ("Return to Small Mammals");
returnBack.setPreferredSize (new Dimension (400, 50));
returnBack.setActionCommand ("4");
returnBack.addActionListener (this);
card10.add (title);
card10.add (returnBack);
p_card.add ("10", card10);
}

```

```

public void moose ()
{ //screen 11 - moose - is set up.
    card11 = new Panel ();
    card11.setBackground (Color.white);
    JLabel title = new JLabel ("Giant Moose");
    title.setFont (new Font ("Arial", Font.PLAIN, 24));
    JButton returnBack = new JButton ("Return to Outdoor Pens");
    returnBack.setPreferredSize (new Dimension (400, 50));
    returnBack.setActionCommand ("5");
    returnBack.addActionListener (this);
    card11.add (title);
    card11.add (returnBack);
    p_card.add ("11", card11);
}

public void okapi ()
{ //screen 12 - okapi - is set up.

    card12 = new Panel ();
    card12.setBackground (Color.white);
    JLabel title = new JLabel ("Beautiful Okapi");
    title.setFont (new Font ("Arial", Font.PLAIN, 24));
    JButton returnBack = new JButton ("Return to Outdoor Pens");
    returnBack.setPreferredSize (new Dimension (400, 50));
    returnBack.setActionCommand ("5");
    returnBack.addActionListener (this);
    card12.add (title);
    card12.add (returnBack);
    p_card.add ("12", card12);
}

public void actionPerformed (ActionEvent e)
{ //moves between the screens

    if (e.getActionCommand ().equals ("1"))
        cdLayout.show (p_card, "1");
    else if (e.getActionCommand ().equals ("2"))
        cdLayout.show (p_card, "2");
    else if (e.getActionCommand ().equals ("3"))
        cdLayout.show (p_card, "3");
    else if (e.getActionCommand ().equals ("4"))
        cdLayout.show (p_card, "4");
    else if (e.getActionCommand ().equals ("5"))
        cdLayout.show (p_card, "5");
    else if (e.getActionCommand ().equals ("6"))
        cdLayout.show (p_card, "6");
    else if (e.getActionCommand ().equals ("7"))
        cdLayout.show (p_card, "7");
    else if (e.getActionCommand ().equals ("8"))
        cdLayout.show (p_card, "8");
    else if (e.getActionCommand ().equals ("9"))
        cdLayout.show (p_card, "9");
    else if (e.getActionCommand ().equals ("10"))
        cdLayout.show (p_card, "10");
    else if (e.getActionCommand ().equals ("11"))
        cdLayout.show (p_card, "11");
    else if (e.getActionCommand ().equals ("12"))
        cdLayout.show (p_card, "12");
}

protected static ImageIcon createImageIcon (String path)
{
    java.net.URL imgURL = Zoo.class.getResource (path);
    if (imgURL != null)
    {
        return new ImageIcon (imgURL);
    }
    else
    {
        System.err.println ("Couldn't find file: " + path);
        return null;
    }
}
}

```