To achieve the preceding requirement, Peter needs to perform the following steps:

1. Ensure that the **HangmanGame** Java application is open and active.
2. Create a class, **Menu**,in the **game** package.
3. Replace the code in the **Menu.java** file with the following code:

package game;

import java.awt.Font;

import java.awt.GridBagConstraints;

import java.awt.GridBagLayout;

import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JLabel;

public class Menu extends JFrame

{

JButton option1;

JButton option2;

JButton option3;

JLabel name;

public Menu()

{

option1 = new JButton("Play Game");

option2 = new JButton("View Instructions");

option3 = new JButton("Exit");

name = new JLabel("HANGMAN");

name.setFont(new Font("Serif", Font.PLAIN, 24));

setTitle("Hangman Game");

setSize(300,200);

setResizable(false);

setVisible(true);

}

public void addComponent()

{

setLayout(new GridBagLayout());

GridBagConstraints c = new GridBagConstraints();

c.gridx = 0;

c.gridy = 0;

c.weighty = 0.1;

c.anchor = c.CENTER;

add(name,c);

c.gridx = 0;

c.gridy = 1;

c.fill = c.HORIZONTAL;

add(option1, c);

c.gridx = 0;

c.gridy = 2;

c.fill = c.HORIZONTAL;

add(option2, c);

c.gridx = 0;

c.gridy = 3;

c.fill = c.HORIZONTAL;

add(option3, c);

}

}



# *Note*

|  |
| --- |
| Description: BaseThe Font class is used to set the font, font style, and size of the text. |

1. Create a class, **GameWindow**, in the **game** package.
2. Replace the code in the **GameWindow.java** file with the following code:

package game;

import java.awt.BorderLayout;

import java.awt.Color;

import java.awt.FlowLayout;

import java.awt.Font;

import java.awt.GridBagConstraints;

import java.awt.GridBagLayout;

import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JPanel;

public class GameWindow extends JFrame

{

JButton a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z;

JLabel lblword, lblmessage;

JPanel keypad, key1, key2, key3, screen, notify;

public GameWindow()

{

a = new JButton("A");

b = new JButton("B");

c = new JButton("C");

d = new JButton("D");

e = new JButton("E");

f = new JButton("F");

g = new JButton("G");

h = new JButton("H");

i = new JButton("I");

j = new JButton("J");

k = new JButton("K");

l = new JButton("L");

m = new JButton("M");

n = new JButton("N");

o = new JButton("O");

p = new JButton("P");

q = new JButton("Q");

r = new JButton("R");

s = new JButton("S");

t = new JButton("T");

u = new JButton("U");

v = new JButton("V");

w = new JButton("W");

x = new JButton("X");

y = new JButton("Y");

z = new JButton("Z");

lblmessage = new JLabel("Guess a Country Name");

lblmessage.setFont(new Font("Serif", Font.PLAIN,20 ));

lblword = new JLabel();

lblword.setFont(new Font("Serif", Font.PLAIN, 35));

notify = new JPanel();

notify.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

screen = new JPanel();

screen.setBackground(Color.WHITE);

screen.setSize(0, 200);

keypad= new JPanel();

keypad.setBorder(javax.swing.BorderFactory.createLineBorder(new java.awt.Color(0, 0, 0)));

keypad.setBackground(Color.BLACK);

key1 = new JPanel();

key1.setBackground(Color.BLACK);

key2 = new JPanel();

key2.setBackground(Color.BLACK);

key3 = new JPanel();

key3.setBackground(Color.BLACK);

setTitle("Hangman Game");

setSize(500,450);

setVisible(true);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

}

public void addComponent()

{

GridBagConstraints gc = new GridBagConstraints();

notify.setLayout(new FlowLayout());

notify.add(lblmessage);

screen.setLayout(new GridBagLayout());

screen.add(lblword, gc);

keypad.setLayout(new GridBagLayout());

key1.setLayout(new FlowLayout());

key1.add(q);

key1.add(w);

key1.add(e);

key1.add(r);

key1.add(t);

key1.add(y);

key1.add(u);

key1.add(i);

key1.add(o);

key1.add(p);

gc.gridx = 0;

gc.gridy = 0;

keypad.add(key1, gc);

key2.setLayout(new FlowLayout());

key2.add(a);

key2.add(s);

key2.add(d);

key2.add(f);

key2.add(g);

key2.add(h);

key2.add(j);

key2.add(k);

key2.add(l);

gc.gridx = 0;

gc.gridy = 1;

keypad.add(key2,gc);

key3.setLayout(new FlowLayout());

key3.add(z);

key3.add(x);

key3.add(c);

key3.add(v);

key3.add(b);

key3.add(n);

key3.add(m);

gc.gridx = 0;

gc.gridy = 2;

keypad.add(key3,gc);

setLayout(new BorderLayout());

add(notify, BorderLayout.NORTH);

add(screen, BorderLayout.CENTER);

add(keypad, BorderLayout.SOUTH);

}

}

1. Open the **Hangman.java** file.
2. Replace the code in the **Hangman.java** file with the following code:

package game;

public class Hangman

{

public static void main(String[] args)

{

Menu mobj = new Menu();

mobj.addComponent();

}

}

1. Compile and execute the **HangmanGame** Java application. After executing the application, the output is displayed, as shown in the following figure.



The Output of the HangmanGame Application

1. Close the **Hangman Game** window.
2. Replace the code within the main() method in the **Hangman.java** file with the following code:

GameWindow gobj = new GameWindow();

gobj.addComponent();

1. Compile and execute the **HangmanGame** Java application.