

COIT20256/COIT23001 Assignment 2 Hint

The Application program consists of two classes - PatientManager.java and Patient.java.

```
import java.awt.*;
import java.awt.event.*;
import .....//others

public class PatientManager extends JFrame
{
    // declare variables
    // declare GUI components- JButton, JTextArea etc
    // declare GUI components - JLabel, JComboBox etc
    // declare MenuBar, Menu, MenuItem

    //constructor
    public PatientManager( )
    {
        //buildGUI
        . . . . .
    }

    //private class for event handling
    private class ButtonHandler implements ActionListener
    {
        public void actionPerformed(ActionEvent e)
        {
            String actionString=e.getActionCommand();
            //if actionString equals to "Sort",
            // call method - sort( )
            .....
        }
    }

    //load method definition
    private void load()
    {
        //Read data file and display them
        .....
    }

    private void add()
    {
        . . . . .
    }

    private void delete()
    {
        .....
    }

    private void sort( )
    {
        .....
    }
}
```

```

private void search()
{
    .....
}

private void show()
{
    .....
}

private void clear()
{
    .....
}

//save data to file
private void saveFile()
{
    .....
}

//other helper method if any

//main method definition
public static void main(String [ ] args)
{
    .....
}

} //end of class definition

public class Patient implements Comparable<Patient>
{
    //definition
}

```

Note:

1)To build a GUI with file menu, you have to add menu bar, menu, and menu item etc.

2)Patient class needs to implement Comparable interface so that two Patient objects can compare based on their name. An example of a class implements Comparable interface can be found below.

```
//A circle class implements comparable interface
// so that two circle objects can compare based on radius

public class Circle implements Comparable<Circle>
{
    private int radius;

    public Circle(int r)
    {
        radius=r;
    }

    public int compareTo(Circle other)
    {
        return (radius-other.radius);
    }

    //get,set method
}
```