

```

import java.io.*;
import java.io.FileWriter;
import java.io.IOException;
import java.io.OutputStreamWriter;
import java.io.Writer;
import java.util.Vector;

import javax.xml.parsers.SAXParser;
import javax.xml.parsers.SAXParserFactory;

import org.xml.sax.Attributes;
import org.xml.sax.SAXException;
import org.xml.sax.helpers.DefaultHandler;

public class XML extends DefaultHandler
{

    private String nodo;
    private boolean aCapo = false;
    static Vector elenc = null;
    String s1,s2,s3,s4,salvaS1,salvaS2,salvaS3,salvaS4;
    static int conta=0;

    public static void importaFileXML(String nomeFile, Vector elenco)
    {
        boolean trovato= trovaPercorso(nomeFile); //controlla se esiste il file

        if (trovato)
        {
            elenc = elenco;
            leggiFileXML(nomeFile);
            elenco=elenc;
            System.out.println("Caricate "+ conta + " persone nel vettore");
        }
        else System.out.println("Nessun file trovato !!!");
    }

    public static boolean trovaPercorso(String nomeFile)
    {
        boolean trovato= false;
        try
        {
            FileReader fileFisico = new FileReader( nomeFile );
            trovato=true;
        }
        catch (IOException e) { }
        return trovato;
    }

    public static void leggiFileXML(String nomeFile)
    {

        DefaultHandler handler = new XML();
        SAXParserFactory factory = SAXParserFactory.newInstance();
        try
        {
            out = new OutputStreamWriter(System.out, "UTF8");
            SAXParser saxParser = factory.newSAXParser();
            saxParser.parse(nomeFile, handler);
        }
        catch (Throwable t) { t.printStackTrace(); }
    }

    private static Writer out;

    public void startElement(String namespaceURI, String lName, String qName, Attributes attrs) throws SAXException
    {

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String name = lName;
if (".".equals(name)) { nodo=qName;
/*
    if (aCapo)    System.out.print("\n"+<" + nodo + "> );
    else          { System.out.print(" "+<" + nodo + "> );
                    aCapo = true;
    }
*/
}

}

public void endElement(String namespaceURI, String sName, String qName) throws SAXException
{
    String name = sName;
    if (".".equals(name)) { nodo=qName;
        //System.out.println("</" + nodo + ">");

        if(nodo=="nome")
        {
            if((int)s1.charAt(0) == 10 ) s1 = " ";
            salvaS1=s1;
        }
        if(nodo=="cognome")
        {
            if((int)s2.charAt(0) == 10 ) s2 = " ";
            salvaS2=s2;
        }
        if(nodo=="telefono")
        {
            if((int)s3.charAt(0) == 10 ) s3 = " ";
            salvaS3=s3;
        }
        if(nodo=="email")
        {
            if((int)s4.charAt(0) == 10 ) s4 = " ";
            salvaS4=s4;
        }

        if(nodo=="CONTATTO")
        {
            Contatto v = new Contatto(salvaS1,salvaS2,salvaS3,salvaS4);
            elenc.addElement(v);
            conta++;
        }
    }
}

public void characters(char buf[], int offset, int len) throws SAXException
{
    String s = new String(buf, offset, len);
    if(s.length()>0)
    {

        Contatto v = null;

        if(nodo=="nome")           { s1=s;
                                      //System.out.println(s);
                                      }
        if(nodo=="cognome")        { s2=s;
                                      //System.out.println(s);
                                      }
        if(nodo=="telefono")       { s3=s;
                                      //System.out.println(s);
                                      }
        if(nodo=="email")          {
            s4 = s; //System.out.println(s);
            //v = new Contatto(s1,s2,s3,s4);
            //elenc.addElement(v);
        }
    }
}
```

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        XML.java

        //conta++;
    }
    aCapo = false;
}

public static void esportaFileXML(String nomeFile, Vector elenco)
{
    try
    {
        // true fa l'append
        FileWriter fileFisico = new FileWriter(nomeFile, false); // false sovrascrive

        BufferedWriter fout      = new BufferedWriter(fileFisico);

        fout.write("<RUBRICA>");
        fout.newLine();

        for(int i=0; i<elenco.size(); i++)
        {
            Contatto v = (Contatto) elenco.elementAt(i);
            String nome= "" + v.getNome();
            String cognome = "" + v.getCognome();
            String telefono = "" + v.getTelefono();
            String email = "" + v.getEmail();

            fout.write("<CONTATTO>");
            fout.newLine();
            fout.write("<nome>" + nome + "</nome>");
            fout.newLine();
            fout.write("<cognome>" + cognome + "</cognome> ");
            fout.newLine();
            fout.write("<telefono>" + telefono + "</telefono> ");
            fout.newLine();
            fout.write("<email>" + email + "</email> ");
            fout.newLine();
            fout.write("</CONTATTO> ");
            fout.newLine();
        }

        fout.write("</RUBRICA>");

        fout.close();
    }
    catch(IOException e)
    {
        System.out.println("Errore nella chiusura file");
        System.exit(1);
    }
}
}

```