

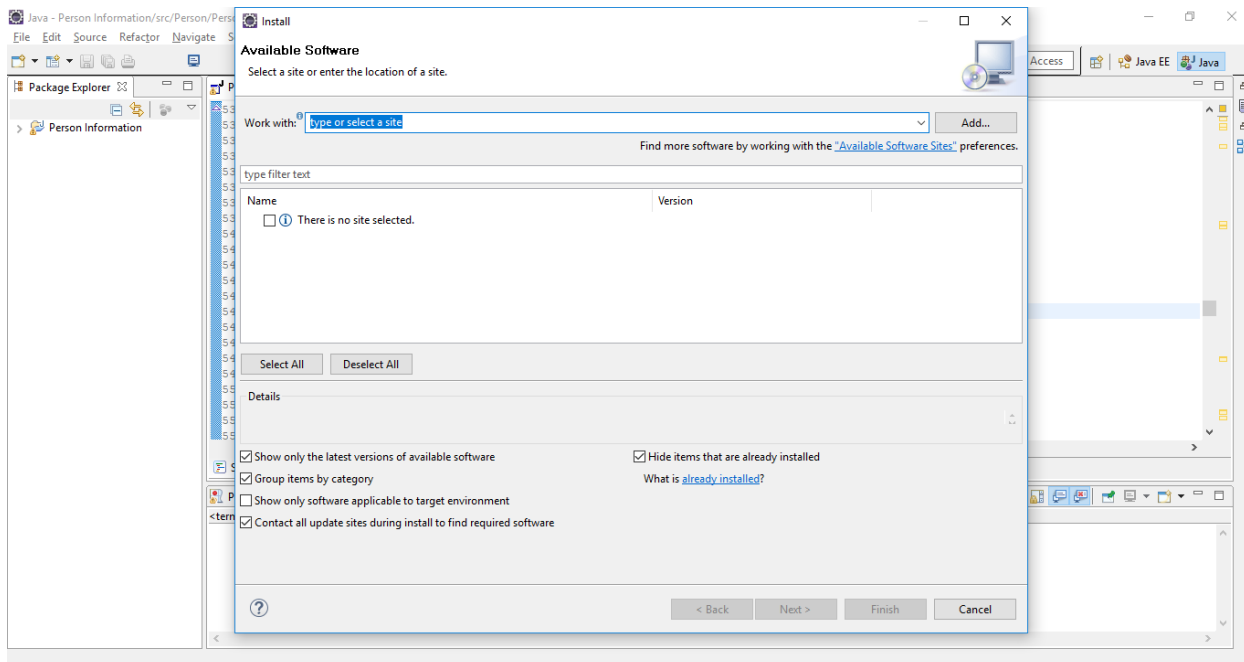
# Person Information System

## 1.Tool Description:

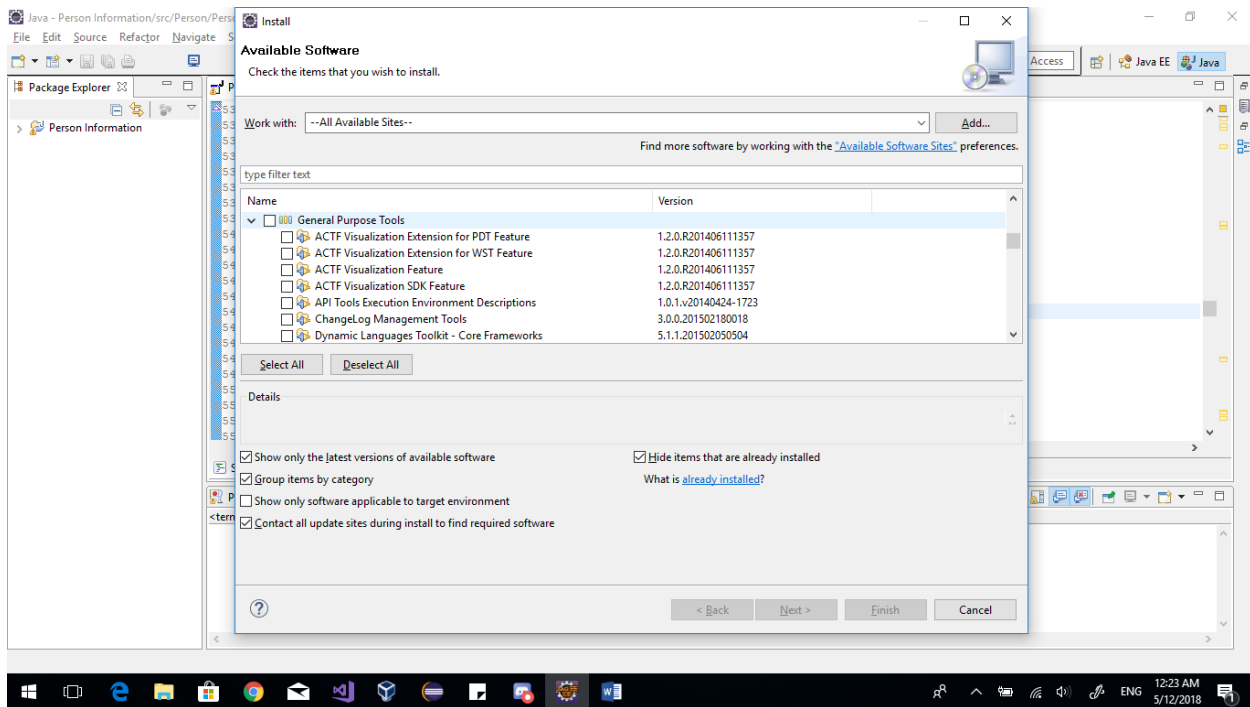
1. This tool is used to store the data about person (first name, last name, title, phone, age, email).
2. Main Functions are :
  - a. Add a new person's information.
  - b. Update person's information.
  - c. List person information inside a JSON file.
  - d. Filter based on any field selected.
  - e. Sort based on any field selected.
  - f. Delete any person's information.

## 2.Setting up the environment:

1. Any "Eclipse" version is needed and click on this link to download it: [link](#).
2. After you've downloaded it you need to install some packages to it:
  - Press "Help" on the tool bar.
  - Install new software.



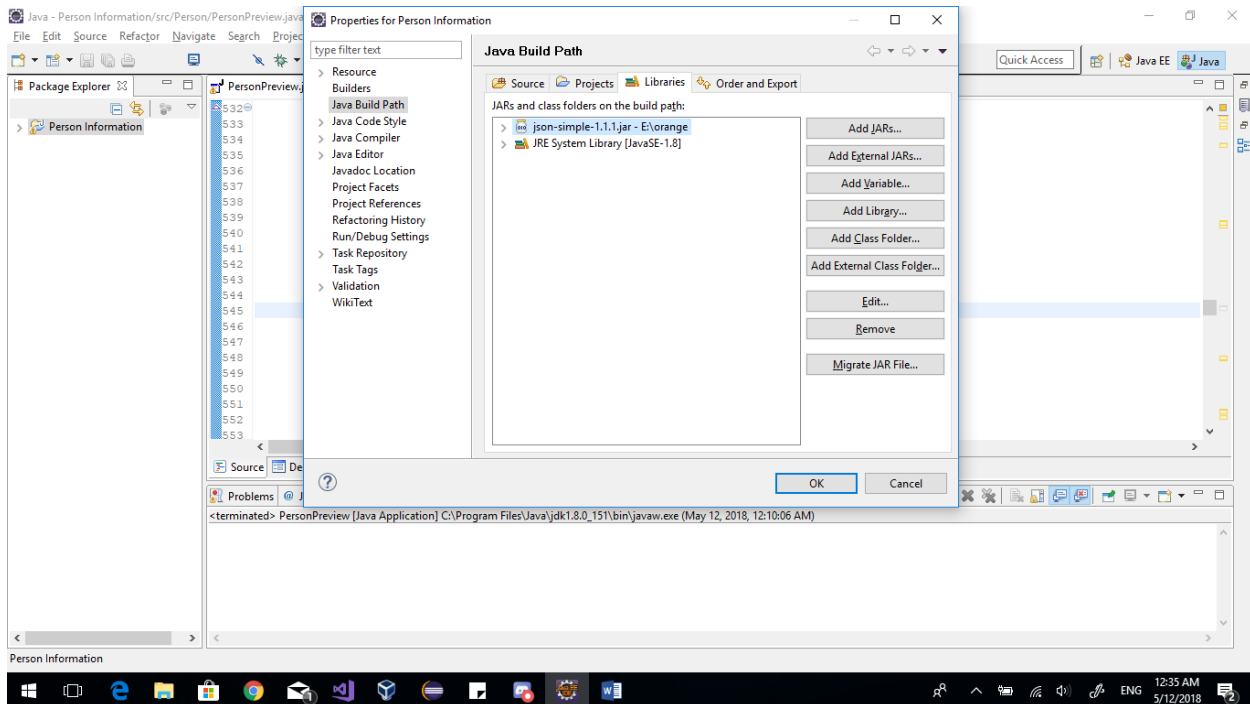
- Work with: Choose all available sites--.



- After the link has finished pending you will get all packages you only need to choose from “General Purpose Tools” the following packages.

Name	Version	Id
> Eclipse IDE for Java EE Developers	4.4.2.20150219-0708	epp.package.jee
> Swing Designer	1.7.0.r44x201405021...	org.eclipse.wb.swing.feature.fe
> Swing Designer Documentation	1.7.0.r44x201405030...	org.eclipse.wb.swing.doc.user.
> SWT Designer	1.7.0.r44x201405021...	org.eclipse.wb.rcp.feature.fe
> SWT Designer Core	1.7.0.r44x201405021...	org.eclipse.wb.swt.feature.fe
> SWT Designer Documentation	1.7.0.r44x201405030...	org.eclipse.wb.rcp.doc.user.fe
> SWT Designer SWT_AWT Support	1.7.0.r44x201405021...	org.eclipse.wb.rcp.SWT_AWT_s
> SWT Designer XWT Support (requires Eclipse WTP/WST)	1.7.0.r44x201405021...	org.eclipse.wb.xwt.feature.fe
> TCF Terminal (Console) View	1.2.0.201406042322	org.eclipse.tcf.te.terminals.fe
> WindowBuilder Core	1.7.0.r44x201405021...	org.eclipse.wb.core.feature.fe
> WindowBuilder Core Documentation	1.7.0.r44x201405021...	org.eclipse.wb.doc.user.fe
> WindowBuilder Core UI	1.7.0.r44x201405021...	org.eclipse.wb.core.ui.feature.f
> WindowBuilder GroupLayout Support	1.7.0.r44x201405021...	org.eclipse.wb.layout.group.fe
> WindowBuilder Java Core	1.7.0.r44x201405021...	org.eclipse.wb.core.java.featur
> WindowBuilder XML Core (requires Eclipse WTP/WST)	1.7.0.r44x201405021...	org.eclipse.wb.core.xml.feature

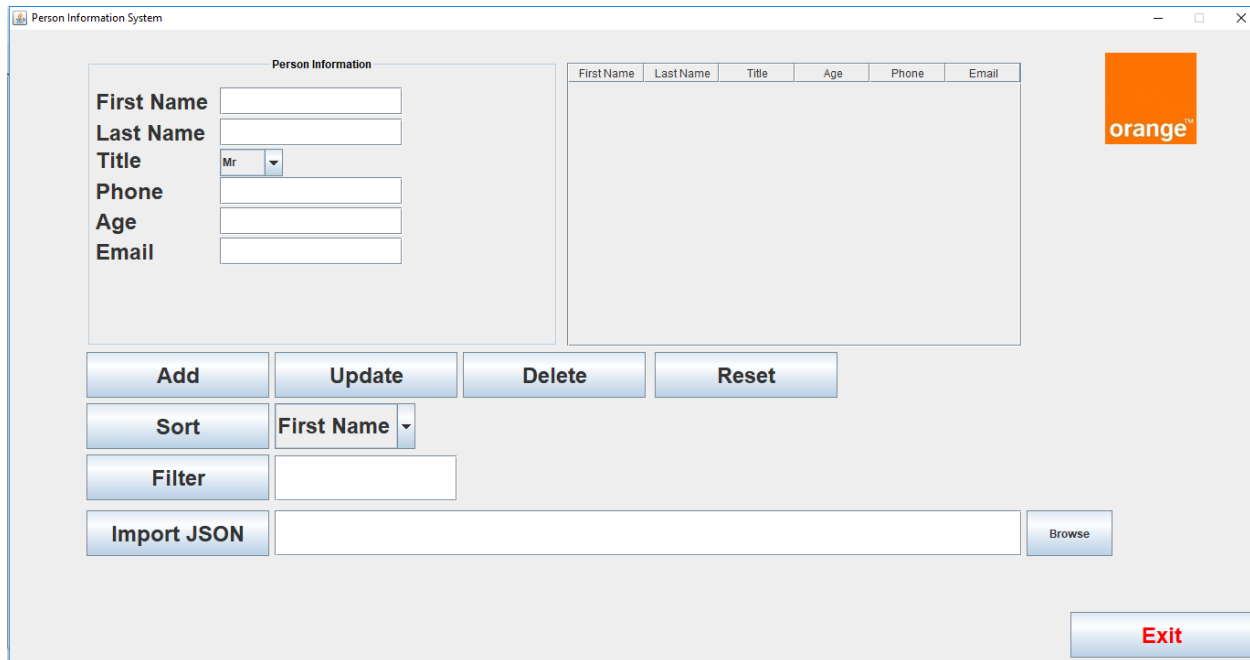
- Now you can open the project from eclipse from File -> Import -> General ->Existing projects to workspace.
- Finally you will have 1 error you need to change a path of JSON simple jar file to the new path you've downloaded the project to by going to the project properties -> Java Build Path.



- A bit long but now you can finally run the project and go to the next phase.

### 3.How to use the tool:

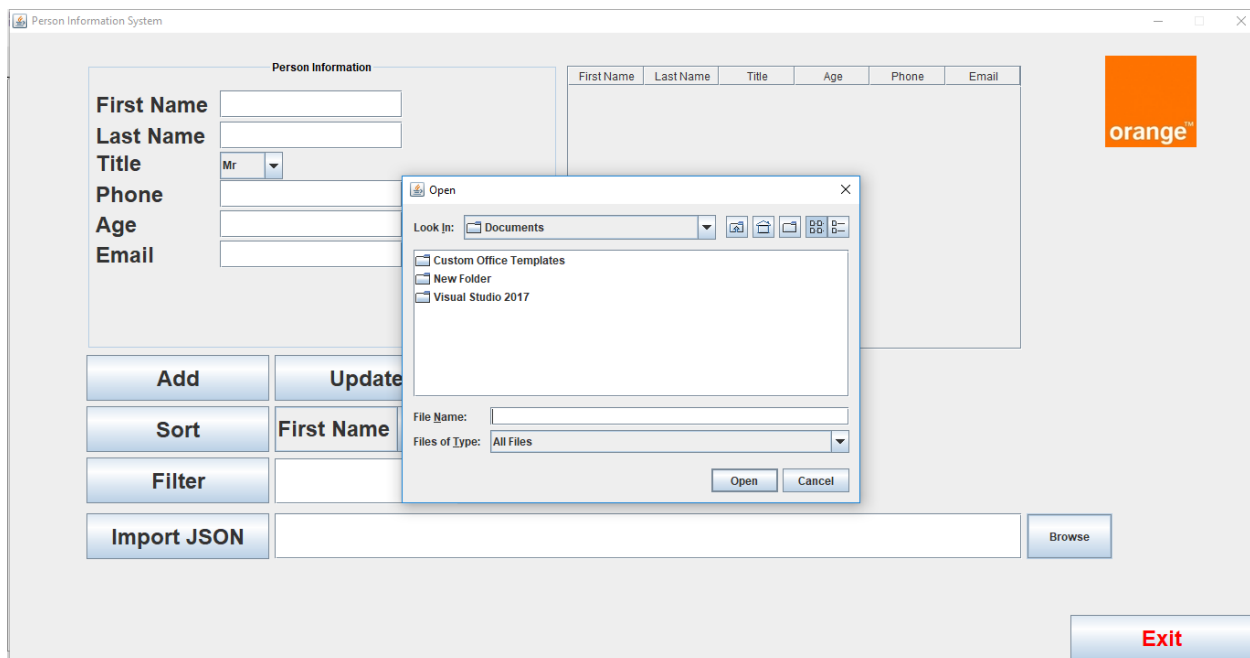
#### 1. Tool interface:



The screenshot shows the 'Person Information System' window. On the left, under 'Person Information', there are input fields for First Name, Last Name, Title (with a dropdown menu showing 'Mr'), Phone, Age, and Email. To the right is a table with columns: First Name, Last Name, Title, Age, Phone, and Email. Below the form and table are buttons for 'Add', 'Update', 'Delete', and 'Reset'. Further down are 'Sort' (with a dropdown menu showing 'First Name') and 'Filter' (with an empty text box). At the bottom left is an 'Import JSON' button next to a text box and a 'Browse' button. In the bottom right corner is a red 'Exit' button. An 'orange' logo is visible in the top right corner of the window.

#### 2. Import the JSON file by two options:

- a. Simply by clicking the “Browse” button. (I’ve included myJSON.json file I’ve been testing on it you can browse for it in the project folder or any other type of JSON files as long as data is saved each record per a line.



This screenshot shows the same 'Person Information System' window as before, but with an 'Open' file dialog box open over it. The dialog box has a 'Look In:' dropdown set to 'Documents'. It shows a list of files and folders: 'Custom Office Templates', 'New Folder', and 'Visual Studio 2017'. At the bottom of the dialog, there is a 'File Name:' field, a 'Files of Type:' dropdown set to 'All Files', and 'Open' and 'Cancel' buttons. The background application window is partially obscured by the dialog box.

- b. Or by copying down the path of the file to the text box next to “Import JSON” button.

The screenshot shows the 'Person Information System' application window. On the left, there is a 'Person Information' form with fields for First Name, Last Name, Title (a dropdown menu currently showing 'Mr'), Phone, Age, and Email. To the right of the form is a table with columns: First Name, Last Name, Title, Age, Phone, and Email. The table is currently empty. Below the form and table are several buttons: 'Add', 'Update', 'Delete', 'Reset', 'Sort' (with a dropdown menu showing 'First Name'), 'Filter' (with an empty text box), 'Import JSON' (with a text box containing the file path 'C:\Users\badam\workspace\Person Information\myJSON.json' and a 'Browse' button next to it), and 'Exit' (a red button in the bottom right corner). An 'orange' logo is visible in the top right corner of the window.

3. After you have imported the JSON file you will be able to see all the persons' data.

This screenshot shows the same 'Person Information System' application window after importing data from a JSON file. The 'Person Information' form on the left remains the same. The table on the right now contains six rows of data. Below the table are the same buttons as in the previous screenshot. The 'Import JSON' text box still contains the same file path. The 'orange' logo is still in the top right corner.

First Name	Last Name	Title	Age	Phone	Email
osamd	five	Mr	5	5	sads
Ahmed	Mohamed	Mr	22	0101255343	ahmed@g.c.
Mohamed	Desoky	Mr	28	214125125	Mohamed@i...
osman	test	Mr	38	12570912	osman@ga...
first	second	Mr	18	1291292	second@ga...
jana	khaled	Miss	10	21512951	jana@ha.com

#### 4. How to add:

Person Information System

Person Information

First Name

Last Name

Title

Phone

Age

Email

First Name	Last Name	Title	Age	Phone	Email
oasmd	five	Mr	5	5	sads
Ahmed	Mohamed	Mr	22	0101255343	ahmed@g.c...
Mohamed	Desoky	Mr	28	214125125	Mohamed@l...
osman	test	Mr	38	12570912	osman@ga...
first	second	Mr	18	1291292	second@ga...
jana	khaled	Miss	10	21512951	jana@ha.com

Person Information System

Person Information

First Name

Last Name

Title

Age

Phone

Email

First Name	Last Name	Title	Age	Phone	Email
Ahmed	Mohamed	Mr	22	0101255343	ahmed@g.c...
Mohamed	Desoky	Mr	28	214125125	Mohamed@l...
jana	khaled	Miss	10	21512951	jana@ha.com
New	Person	Mr	25	010212121	new@new.c...
Update	Person	Mr	30	219512571	Update@u.c...
mara	tanya	Mr	29	2000	fnans@g.com
Add	Test	Ms	25	01222511654	add.test@t.c...

Person Information System

Successfully added a new row!

5. How to update:

- a. Choose a row to update it and type in the new info then click update.

Person Information System

Person Information

First Name

Last Name

Title

Phone

Age

Email

First Name	Last Name	Title	Age	Phone	Email
osmnd	Ive	Mr	5	5	sads
Ahmed	Mohamed	Mr	22	0101255343	ahmed@q.c...
Mohamed	Desoky	Mr	28	214125125	Mohamed@i...
osman	test	Mr	38	12570912	osman@ga...
first	second	Mr	18	1291292	second@ga...
jana	khaled	Miss	10	21512951	jana@ha.com
New	Person	Mr	25	010212121	new@new.c...

Add Update Delete Reset

Sort First Name

Filter

Import JSON C:\Users\badam\workspace\Person Information\myJSON.json Browse

Exit

Person Information System

Person Information

First Name

Last Name

Title

Phone

Age

Email

First Name	Last Name	Title	Age	Phone	Email
Ahmed	Mohamed	Mr	22	0101255343	ahmed@q.c...
Mohamed	Desoky	Mr	28	214125125	Mohamed@i...
osman	test	Mr	38	12570912	osman@ga...
first	second	Mr	18	1291292	second@ga...
jana	khaled	Miss	10	21512951	jana@ha.com
New	Person	Mr	25	010212121	new@new.c...
Update	Person	Mr	30	219512571	Update@u.c...

Add Update Delete Reset

Sort First Name

Filter

Import JSON C:\Users\badam\workspace\Person Information\myJSON.json Browse

Exit

Person Information System

Successfully Updated the row!

OK

6. How to delete:
  - b. Choose the row to be deleted then click delete button.
7. How to sort:
  - a. First option to sort is through clicking on the column header for ascending order, the next click will make it descending order and so on.

Person Information System

Person Information

First Name

Last Name

Title Mr

Phone

Age

Email

First Name	Last Name	Title	Age	Phone	Email
Ahmed	Mohamed	Mr	22	0101255343	ahmed@g.c...
first	second	Mr	18	1291292	second@ga...
jana	khaled	Miss	10	21512951	jana@ha.com
Mohamed	Desoky	Mr	28	214125125	Mohamed@l...
New	Person	Mr	25	010212121	new@new.c...
Update	Person	Mr	30	219512571	Update@u.c...

Add Update Delete Reset

Sort First Name

Filter

Import JSON  Browse

Exit

- b. Second option is through choosing the column you want to sort from the combo box .

Person Information System

Person Information

First Name

Last Name

Title Mr

Phone

Age

Email

First Name	Last Name	Title	Age	Phone	Email
Mohamed	Desoky	Mr	28	214125125	Mohamed@l...
jana	khaled	Miss	10	21512951	jana@ha.com
Ahmed	Mohamed	Mr	22	0101255343	ahmed@g.c...
New	Person	Mr	25	010212121	new@new.c...
Update	Person	Mr	30	219512571	Update@u.c...
first	second	Mr	18	1291292	second@ga...

Add Update Delete Reset

Sort Last Name

Filter

Import JSON  Browse

Exit



8. How to filter:

- c. Type in the text field next to filter the value and click “Filter” button.

Person Information System

Person Information

First Name

Last Name

Title

Phone

Age

Email

First Name	Last Name	Title	Age	Phone	Email
Ahmed	Mohamed	Mr	22	0101255343	ahmed@g.c.
Mohamed	Desoky	Mr	28	214125125	Mohamed@i.
Jana	Khaled	Miss	10	21512951	jana@ha.com
New	Person	Mr	25	010212121	new@new.c.
Update	Person	Mr	30	219512571	Update@u.c.

Add Update Delete Reset

Sort

Filter

Import JSON  Browse

Exit

Person Information System

Person Information

First Name

Last Name

Title

Phone

Age

Email

First Name	Last Name	Title	Age	Phone	Email
Ahmed	Mohamed	Mr	22	0101255343	ahmed@g.c.

Add Update Delete Reset

Sort

Filter

Import JSON  Browse

Exit

#### 4.If we decided to change from JSON file to CSV format:

##### a. Edit WriteToFile:

Instead of putting the records as (key,value) will be stored coma separated FirstName,LastName,Title,Phone,Age,Email.

```
92 private void WriteToFile(String Path)
93 {
94     BufferedReader br = null;
95     JSONObject obj = new JSONObject ();
96     try
97     {
98         obj.put("FirstName", FirstName);
99         obj.put("LastName", LastName);
100         obj.put("Title", Title);
101         obj.put("Phone", Phone);
102         obj.put("Age", Age);
103         obj.put("Email", Email);
104     }
105     catch(Exception el)
106     {
107         el.printStackTrace();
108     }
109     try (FileWriter filewriter = new FileWriter(Path,true))
110     {
111         br = new BufferedReader(new FileReader(Path));
112         if (br.readLine() == null) {
113             filewriter.write(obj.toString());
```

##### b. Edit how to Import the file:

Read the file and parse each line with the delimiter ','.

```
542 public void actionPerformed(ActionEvent e) {
543     //C:/Users/badom/workspace/Person Information/myJSON.json
544     PersonList.clear();
545     List<String> RepeatedPersonList = new ArrayList<String>();
546     String JSONPathfile;
547     int RepeatedRows=0;
548     JSONPathfile= JSONPath.getText();
549     DefaultTableModel model = (DefaultTableModel)table.getModel();
550     model.setRowCount(0);
551     String sCurrentLine;
552     JSONParser parser = new JSONParser();
553     BufferedReader br = null;
554     try {
555         br = new BufferedReader(new FileReader(JSONPathfile));
556         while ((sCurrentLine = br.readLine()) != null)
557         {
558             Object obj = parser.parse(sCurrentLine);
559             JSONObject jsonobj = (JSONObject) obj;
560             FirstName= (String) jsonobj.get("FirstName");
561             LastName= (String) jsonobj.get("LastName");
562             Title = (String) jsonobj.get("Title");
563             Age= (String) jsonobj.get("Age");
564             Phone= (String) jsonobj.get("Phone");
565             Email= (String) jsonobj.get("Email");
566             if(!PersonList.contains(FirstName+LastName+Title+Age+Phone+Email))
567             {
568                 PersonList.add(FirstName+LastName+Title+Age+Phone+Email);
569                 model.addRow(new Object[]
570                     {
```

### c. Edit Delete:

First search for the record containing the values to delete then erase the line from the file.

```
210 /
211 private void Delete(String FName,String LName,String TitleArg,String AgeArg,String PhoneArg,String EmailArg,String PathToFile)
212 {
213     JSONParser parser = new JSONParser();
214     BufferedReader br = null;
215     try {
216         int i=1;
217         String sCurrentLine;
218         br = new BufferedReader(new FileReader(PathToFile));
219         while ((sCurrentLine = br.readLine()) != null)
220         {
221             Object obj = parser.parse(sCurrentLine);
222             JSONObject jsonobj = (JSONObject) obj;
223             if (FName.contains((String)jsonobj.get("FirstName")) && LName.contains((String)jsonobj.get("LastName"))
224                 && TitleArg.contains((String)jsonobj.get("Title")) && AgeArg.contains((String)jsonobj.get("Age"))
225                 && PhoneArg.contains((String)jsonobj.get("Phone")) && EmailArg.contains((String)jsonobj.get("Email")))
226             {
227                 jsonobj.remove("FirstName", (String)jsonobj.get("FirstName"));
228                 jsonobj.remove("LastName", (String)jsonobj.get("LastName"));
229                 jsonobj.remove("Title", (String)jsonobj.get("Title"));
230                 jsonobj.remove("Age", (String)jsonobj.get("Age"));
231                 jsonobj.remove("Phone", (String)jsonobj.get("Phone"));
232                 jsonobj.remove("Email", (String)jsonobj.get("Email"));
233             }
234             else
235             {
236                 WriteToNewFile(jsonobj,PathToFile,i);
237                 i++;
```