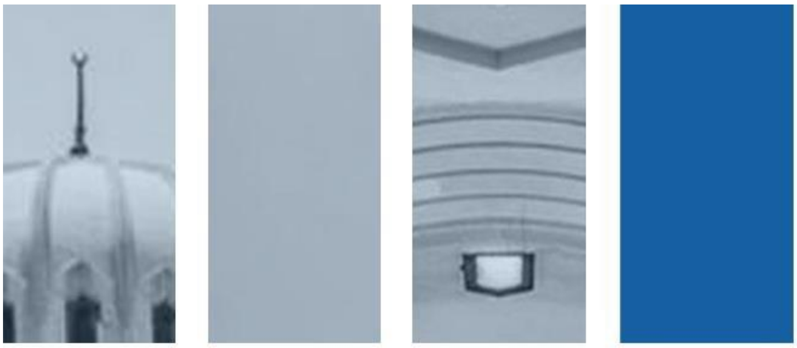


PROJECT SUBMISSIONS

Program: Mechatronics Engineering

Course Code: CSE-231s

Course Name: Advanced Computer Programming

Examination Committee

Dr. Mahmoud Khalil

Eng. Nourhan Mohamed

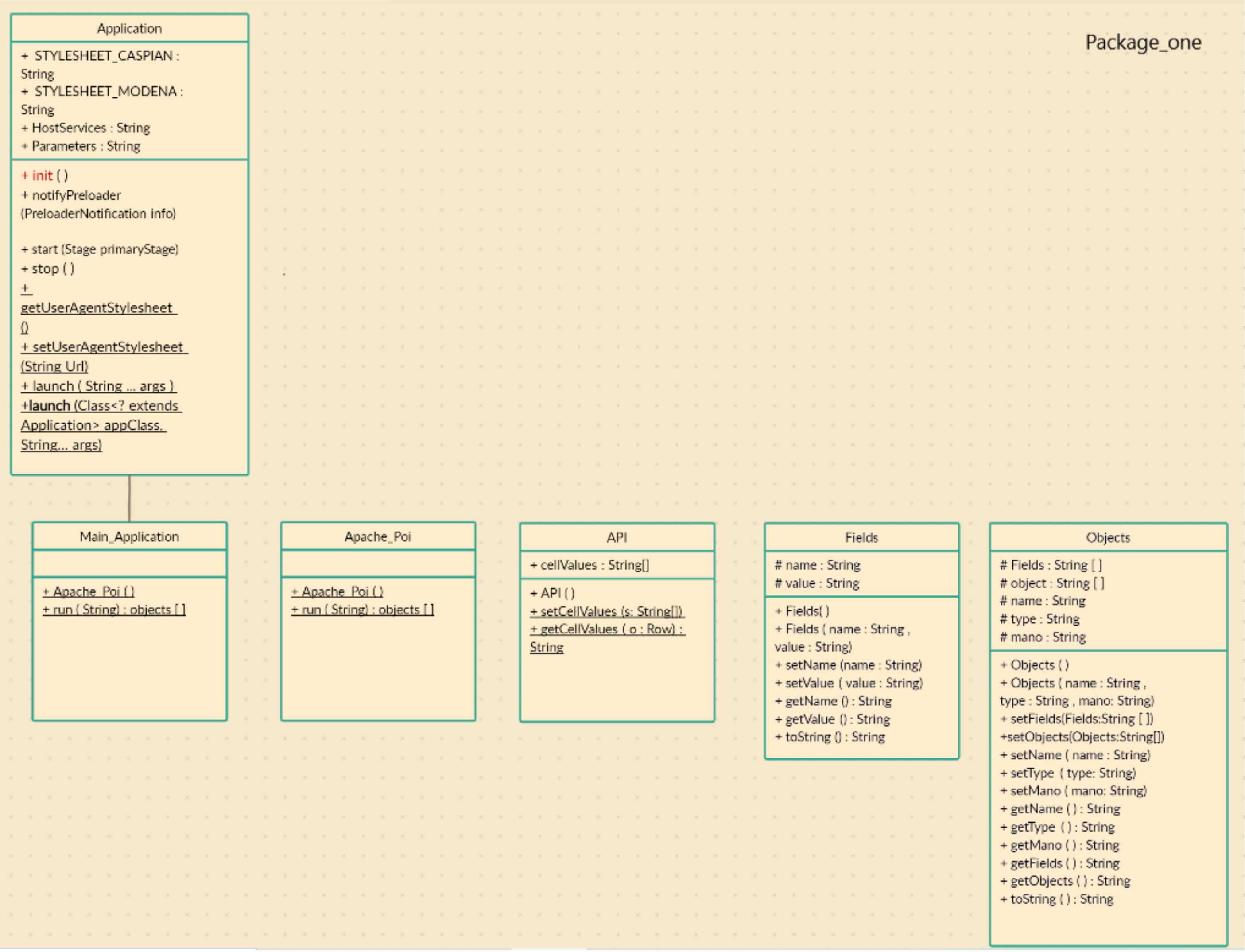
Ain Shams University
Faculty of Engineering
Spring Semester – 2022

Student Names:	**Student Codes:**
El Sayed Ayman El Sayed Ali	1804765
Ahmed Yasser Ahmed Abdel Salam	1805632
Ali Hany Ahmed Ali	1803896

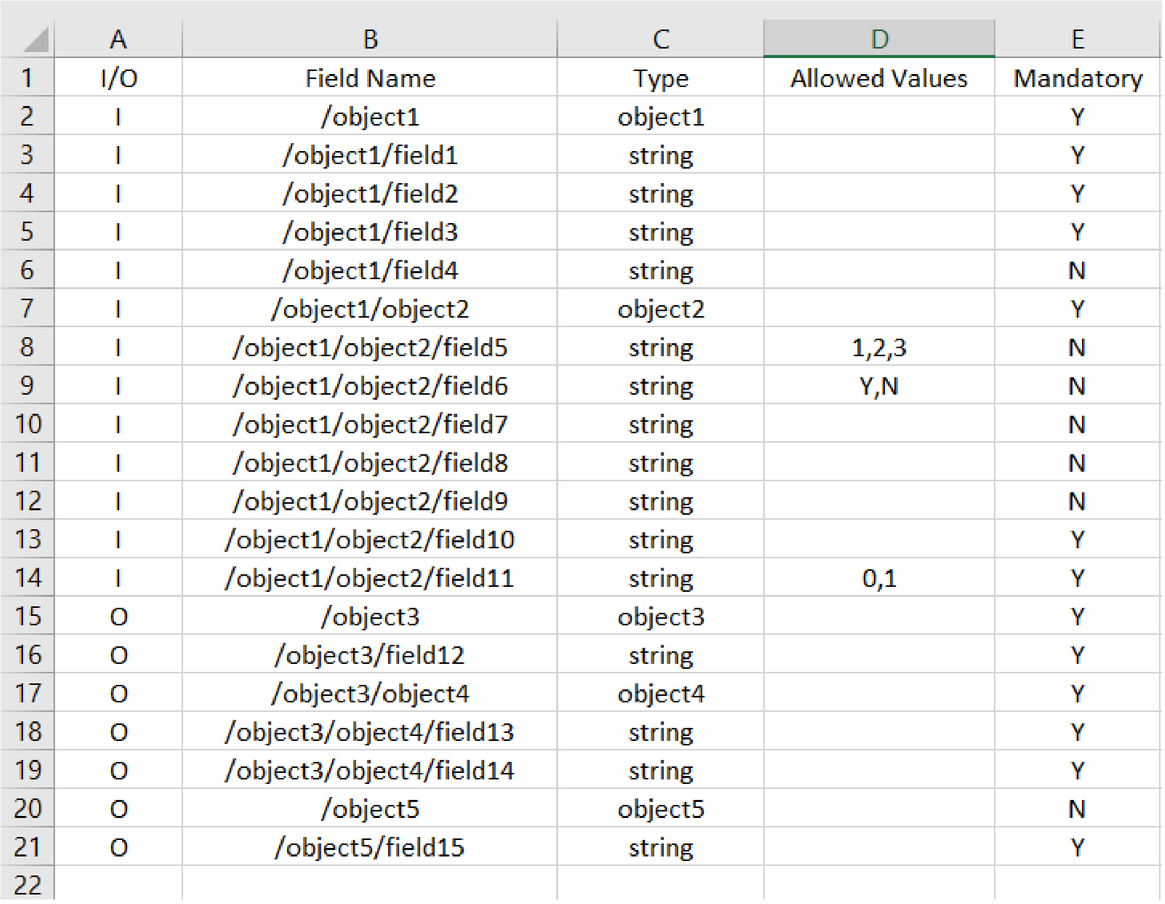
1- Video link:

https://drive.google.com/file/d/1hkz72W1fj1HNaC__n9cWMGJPXdDYH6Y6/view?usp=sharing

2- UML Diagram:

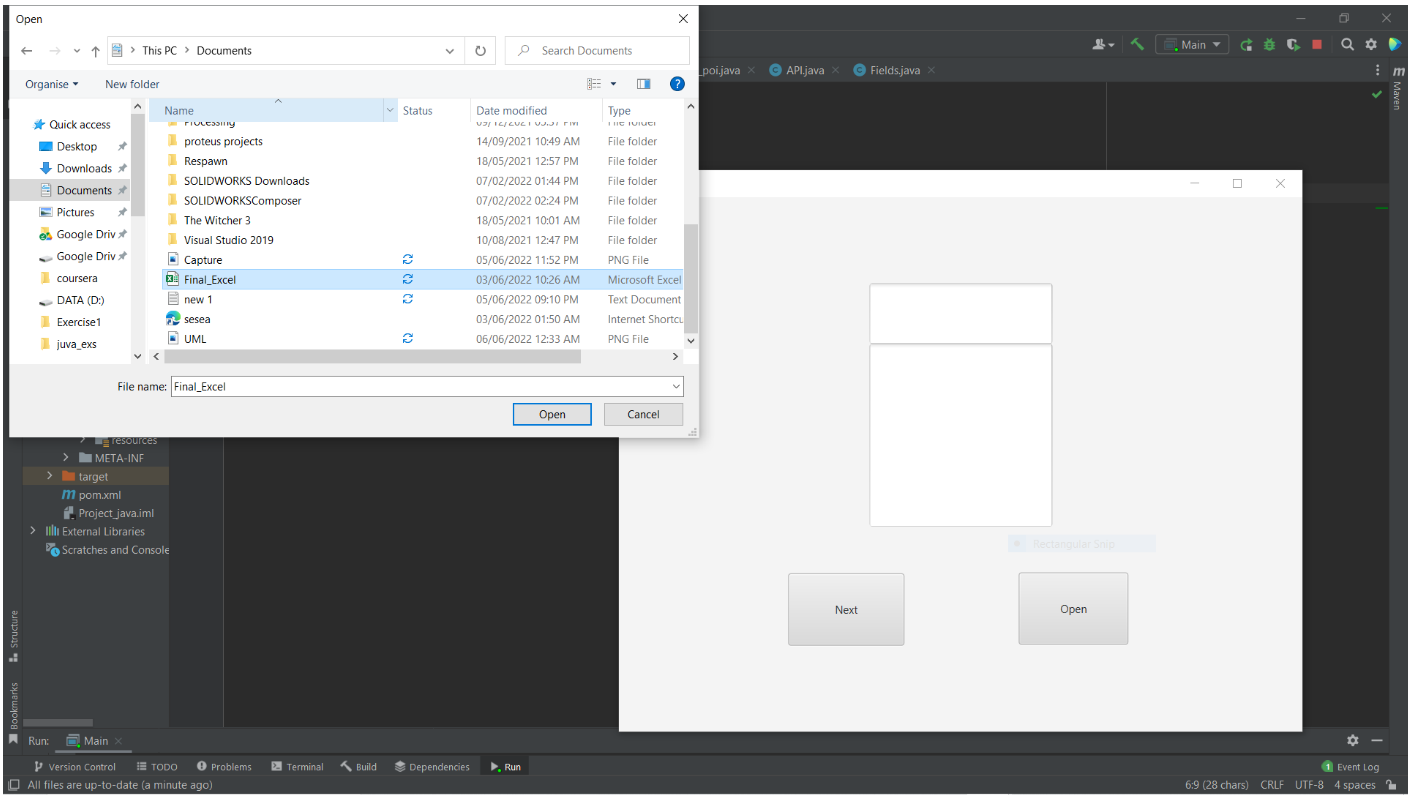

Package_one
Application
+ STYLESHEET_CASPIAN : String
+ STYLESHEET_MODENA : String
+ HostServices : String
+ Parameters : String
+ init ( )
+ notifyPreloader (PreloaderNotification info)
+ start (Stage primaryStage)
+ stop ( )
+ getUserAgentStylesheet ()
+ setUserAgentStylesheet (String Url)
+ launch (String ... args)
+launch (Class<? extends Application> appClass. String... args)
Main_Application
+ Apache_Poi ( )
+ run (String) : objects [ ]
Apache_Poi
+ Apache_Poi ( )
+ run (String) : objects [ ]
API
+ cellValues : String[]
+ API ( )
+ setCellValues (s: String[])
+ getCellValues (o : Row) : String
Fields
# name : String
# value : String
+ Fields( )
+ Fields (name : String , value : String)
+ setName (name : String)
+ setValue (value : String)
+ getName () : String
+ getValue () : String
+ toString () : String
Objects
# Fields : String [ ]
# object : String [ ]
# name : String
# type : String
# mano : String
+ Objects ( )
+ Objects (name : String , type : String , mano: String)
+ setFields(Fields:String [ ])
+setObjects(Objects:String[])
+ setName (name : String)
+ setType (type: String)
+ setMano (mano: String)
+ getName ( ) : String
+ getType ( ) : String
+ getMano ( ) : String
+ getFields ( ) : String
+ getObjects ( ) : String
+ toString ( ) : String

3- screen shots for excel sheet:



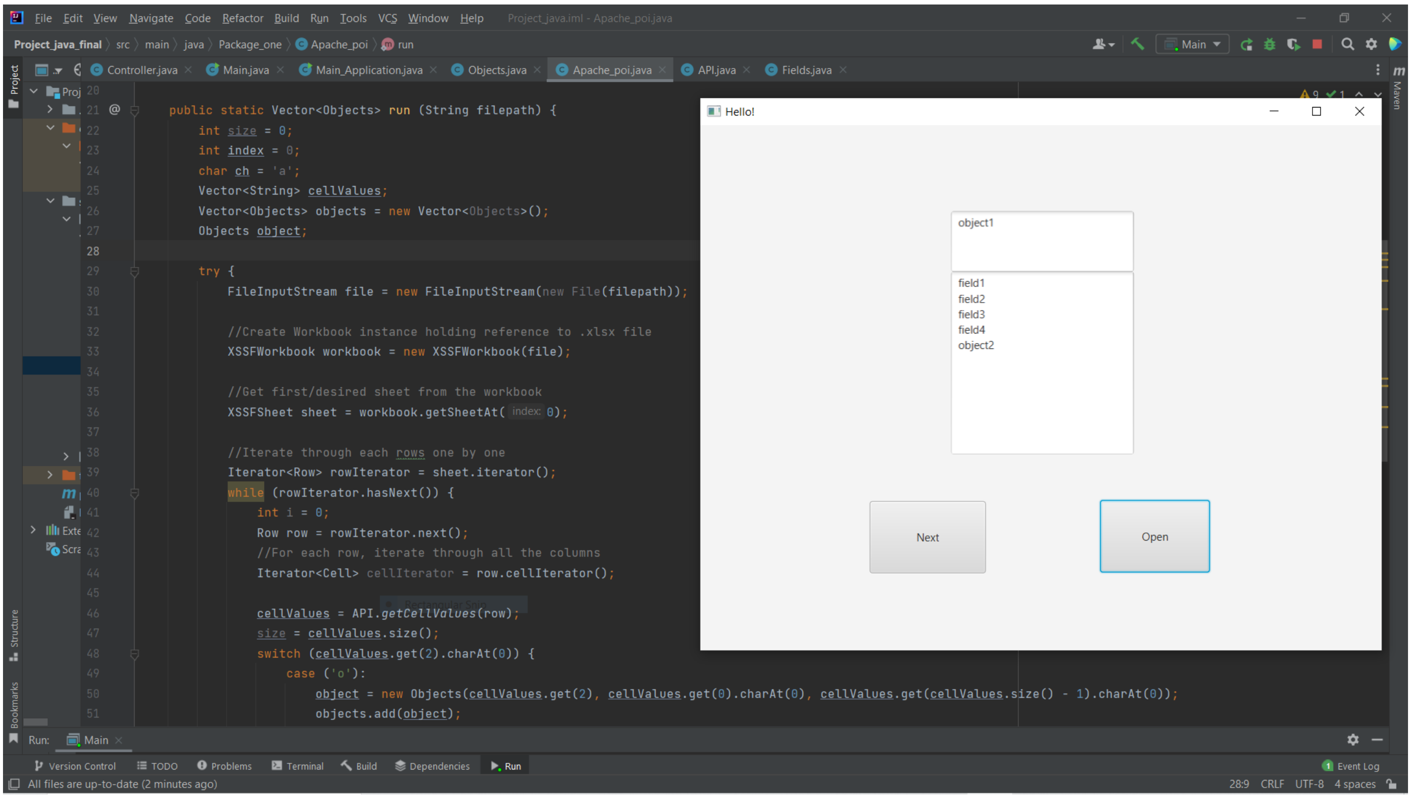
	A	B	C	D	E
1	I/O	Field Name	Type	Allowed Values	Mandatory
2	I	/object1	object1		Y
3	I	/object1/field1	string		Y
4	I	/object1/field2	string		Y
5	I	/object1/field3	string		Y
6	I	/object1/field4	string		N
7	I	/object1/object2	object2		Y
8	I	/object1/object2/field5	string	1,2,3	N
9	I	/object1/object2/field6	string	Y,N	N
10	I	/object1/object2/field7	string		N
11	I	/object1/object2/field8	string		N
12	I	/object1/object2/field9	string		N
13	I	/object1/object2/field10	string		Y
14	I	/object1/object2/field11	string	0,1	Y
15	O	/object3	object3		Y
16	O	/object3/field12	string		Y
17	O	/object3/object4	object4		Y
18	O	/object3/object4/field13	string		Y
19	O	/object3/object4/field14	string		Y
20	O	/object5	object5		N
21	O	/object5/field15	string		Y
22					

4- screen shots for the output of testing the program:



Name	Status	Date modified	Type
Processing			
proteus projects		14/09/2021 10:49 AM	File folder
Respawn		18/05/2021 12:57 PM	File folder
SOLIDWORKS Downloads		07/02/2022 01:44 PM	File folder
SOLIDWORKSComposer		07/02/2022 02:24 PM	File folder
The Witcher 3		18/05/2021 10:01 AM	File folder
Visual Studio 2019		10/08/2021 12:47 PM	File folder
Capture	↻	05/06/2022 11:52 PM	PNG File
Final_Excel	↻	03/06/2022 10:26 AM	Microsoft Excel
new 1	↻	05/06/2022 09:10 PM	Text Document
sesea		03/06/2022 01:50 AM	Internet Shortcu
UML	↻	06/06/2022 12:33 AM	PNG File

File name: Final_Excel

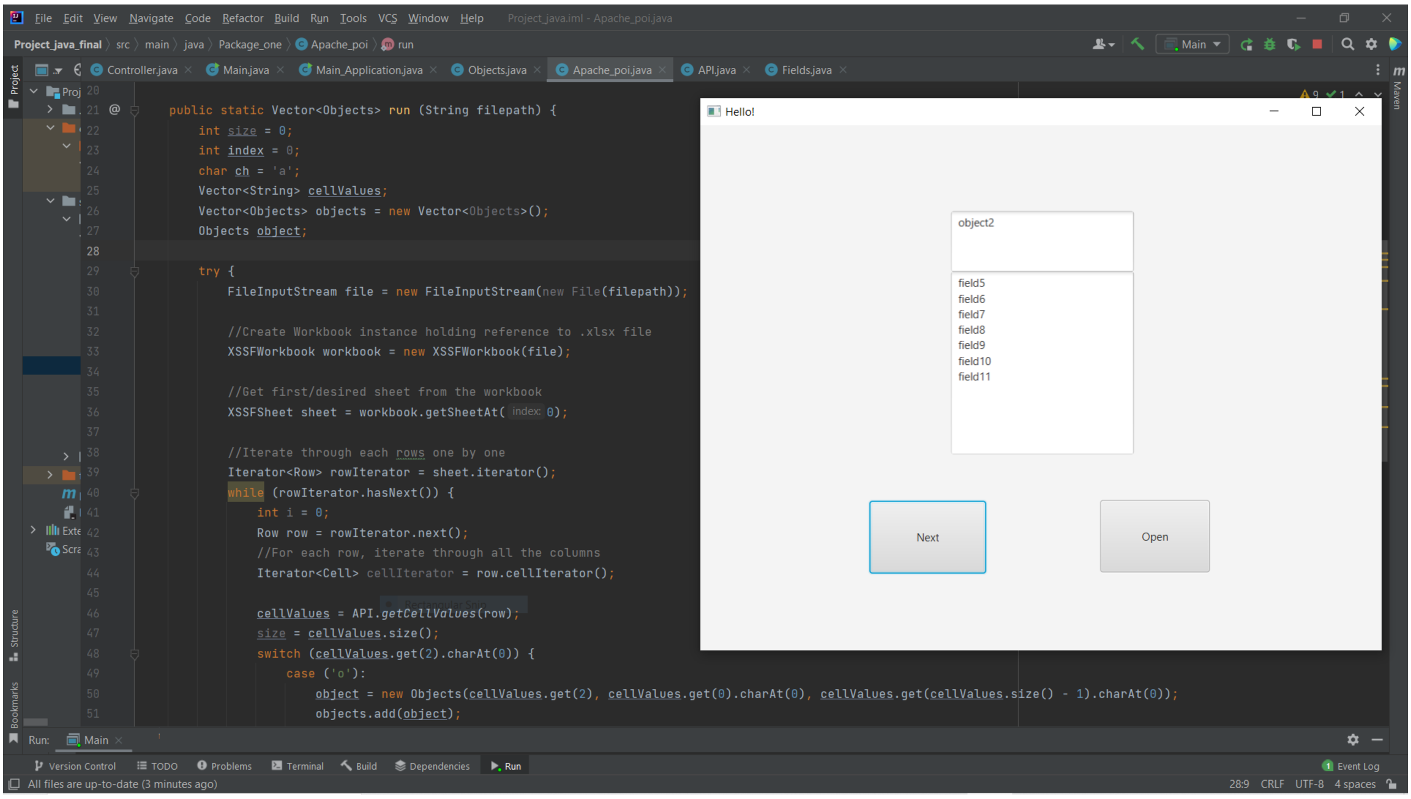


File Edit View Navigate Code Refactor Build Run Tools VCS Window Help
Project_java.iml - Apache_poi.java
Project_java_final src main java Package_one Apache_poi run
Controller.java Main.java Main_Application.java Objects.java Apache_poi.java API.java Fields.java
Hello!
Next
Open
Run: Main
Version Control TODO Problems Terminal Build Dependencies Run
Event Log
28:9 CRLF UTF-8 4 spaces

```
public static Vector<Objects> run (String filepath) {
    int size = 0;
    int index = 0;
    char ch = 'a';
    Vector<String> cellValues;
    Vector<Objects> objects = new Vector<Objects>();
    Objects object;

    try {
        FileInputStream file = new FileInputStream(new File(filepath));

        //Create Workbook instance holding reference to .xlsx file
        XSSFWorkbook workbook = new XSSFWorkbook(file);

        //Get first/desired sheet from the workbook
        XSSFSheet sheet = workbook.getSheetAt( index: 0);

        //Iterate through each rows one by one
        Iterator<Row> rowIterator = sheet.iterator();
        while (rowIterator.hasNext()) {
            int i = 0;
            Row row = rowIterator.next();
            //For each row, iterate through all the columns
            Iterator<Cell> cellIterator = row.cellIterator();

            cellValues = API.getCellValues(row);
            size = cellValues.size();
            switch (cellValues.get(2).charAt(0)) {
                case ('o'):
                    object = new Objects(cellValues.get(2), cellValues.get(0).charAt(0), cellValues.get(cellValues.size() - 1).charAt(0));
                    objects.add(object);
```

```
object1

field1
field2
field3
field4
object2
```

All files are up-to-date (2 minutes ago)

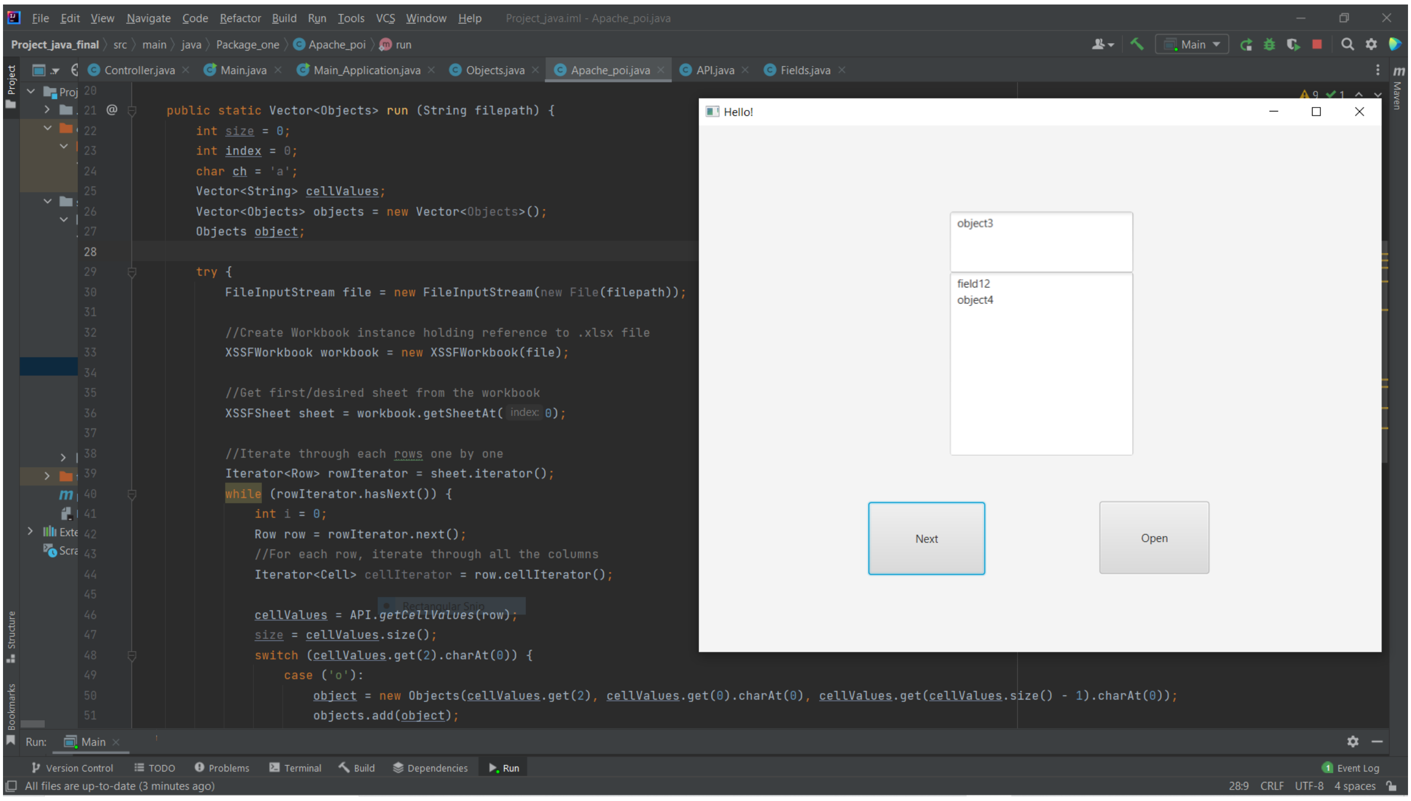


File Edit View Navigate Code Refactor Build Run Tools VCS Window Help
Project_java.iml - Apache_poi.java
Project_java_final src main java Package_one Apache_poi run
Controller.java Main.java Main_Application.java Objects.java Apache_poi.java API.java Fields.java
Hello!
Next
Open
Run: Main
Version Control TODO Problems Terminal Build Dependencies Run
Event Log
28:9 CRLF UTF-8 4 spaces

```
public static Vector<Objects> run (String filepath) {
    int size = 0;
    int index = 0;
    char ch = 'a';
    Vector<String> cellValues;
    Vector<Objects> objects = new Vector<Objects>();
    Objects object;

    try {
        FileInputStream file = new FileInputStream(new File(filepath));

        //Create Workbook instance holding reference to .xlsx file
        XSSFWorkbook workbook = new XSSFWorkbook(file);

        //Get first/desired sheet from the workbook
        XSSFSheet sheet = workbook.getSheetAt( index: 0);

        //Iterate through each rows one by one
        Iterator<Row> rowIterator = sheet.iterator();
        while (rowIterator.hasNext()) {
            int i = 0;
            Row row = rowIterator.next();
            //For each row, iterate through all the columns
            Iterator<Cell> cellIterator = row.cellIterator();

            cellValues = API.getCellValues(row);
            size = cellValues.size();
            switch (cellValues.get(2).charAt(0)) {
                case ('o'):
                    object = new Objects(cellValues.get(2), cellValues.get(0).charAt(0), cellValues.get(cellValues.size() - 1).charAt(0));
                    objects.add(object);
```

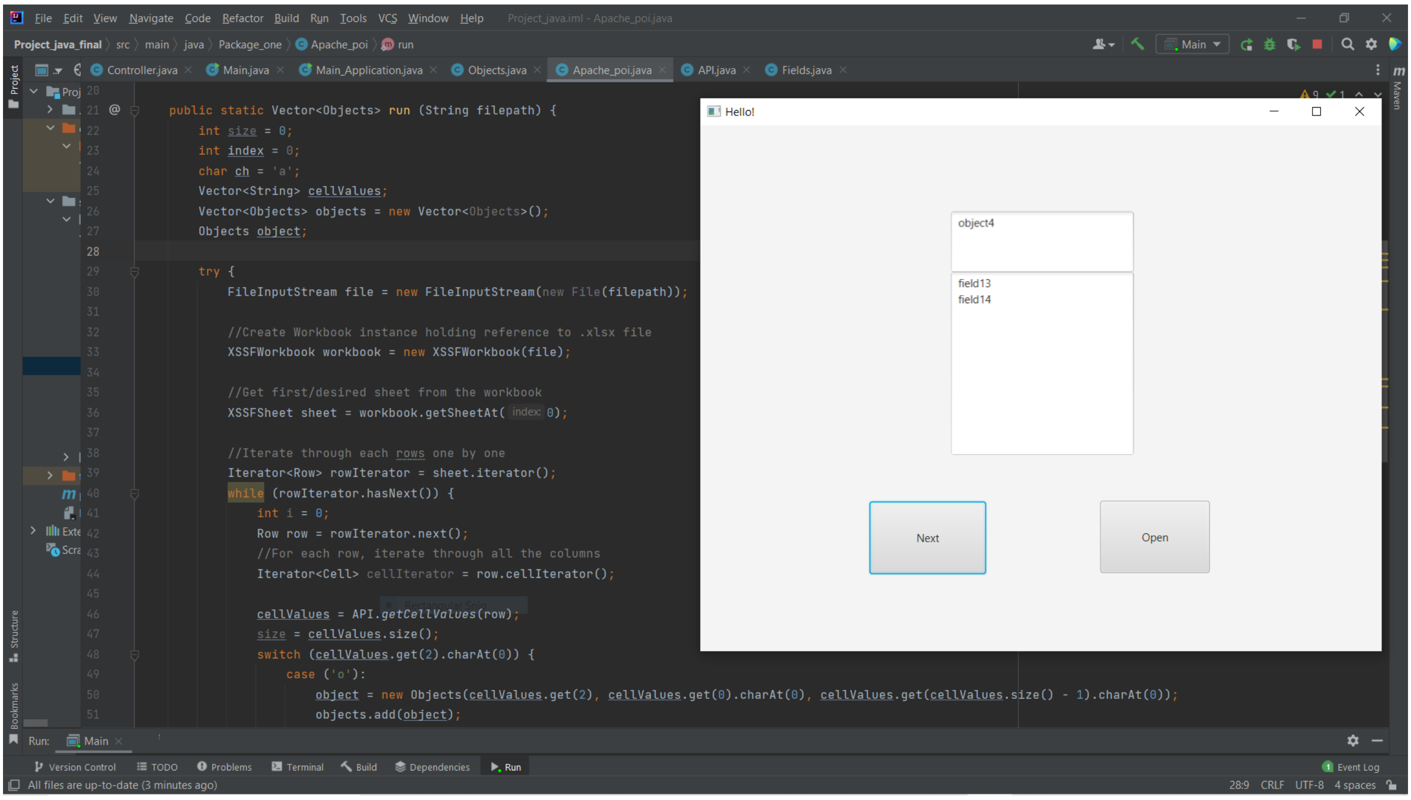
```
object2

field5
field6
field7
field8
field9
field10
field11
```

All files are up-to-date (3 minutes ago)



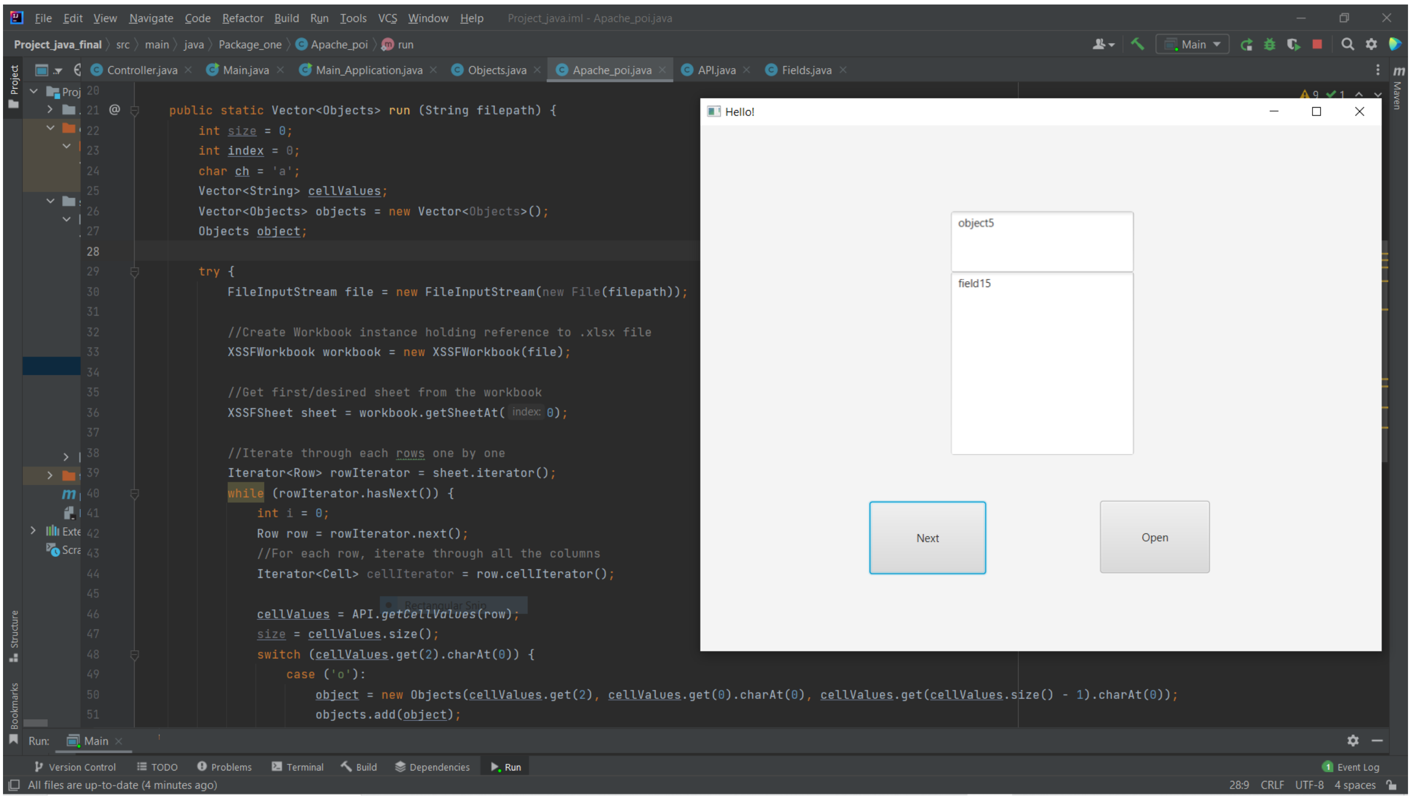
```java
public static Vector<Objects> run (String filepath) {
    int size = 0;
    int index = 0;
    char ch = 'a';
    Vector<String> cellValues;
    Vector<Objects> objects = new Vector<Objects>();
    Objects object;

    try {
        FileInputStream file = new FileInputStream(new File(filepath));

        //Create Workbook instance holding reference to .xlsx file
        XSSFWorkbook workbook = new XSSFWorkbook(file);

        //Get first/desired sheet from the workbook
        XSSFSheet sheet = workbook.getSheetAt( index: 0);

        //Iterate through each rows one by one
        Iterator<Row> rowIterator = sheet.iterator();
        while (rowIterator.hasNext()) {
            int i = 0;
            Row row = rowIterator.next();
            //For each row, iterate through all the columns
            Iterator<Cell> cellIterator = row.cellIterator();

            cellValues = API.getCellValues(row);
            size = cellValues.size();
            switch (cellValues.get(2).charAt(0)) {
                case ('o'):
                    object = new Objects(cellValues.get(2), cellValues.get(0).charAt(0), cellValues.get(cellValues.size() - 1).charAt(0));
                    objects.add(object);
```

All files are up-to-date (3 minutes ago)

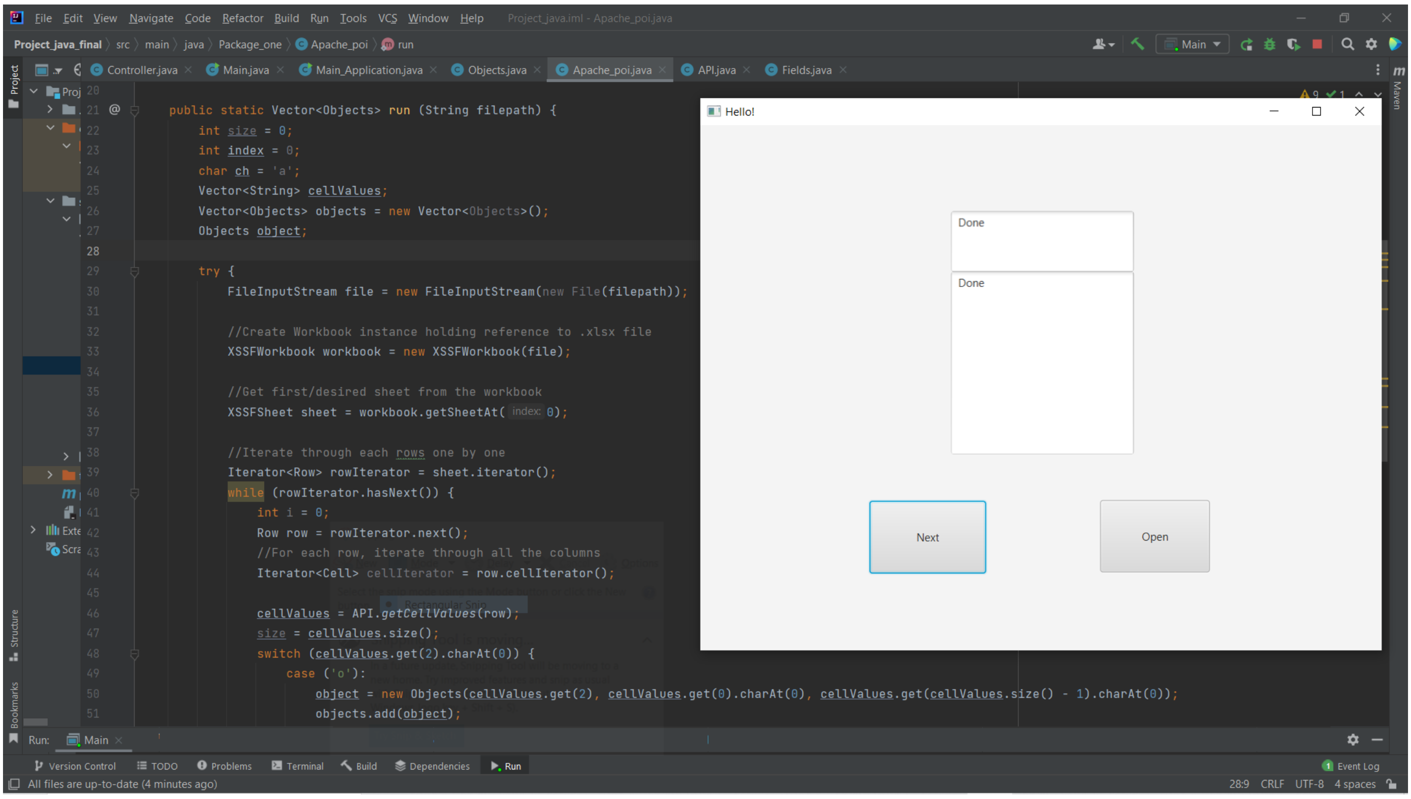


```java
public static Vector<Objects> run (String filepath) {
    int size = 0;
    int index = 0;
    char ch = 'a';
    Vector<String> cellValues;
    Vector<Objects> objects = new Vector<Objects>();
    Objects object;

    try {
        FileInputStream file = new FileInputStream(new File(filepath));

        //Create Workbook instance holding reference to .xlsx file
        XSSFWorkbook workbook = new XSSFWorkbook(file);

        //Get first/desired sheet from the workbook
        XSSFSheet sheet = workbook.getSheetAt( index: 0);

        //Iterate through each rows one by one
        Iterator<Row> rowIterator = sheet.iterator();
        while (rowIterator.hasNext()) {
            int i = 0;
            Row row = rowIterator.next();
            //For each row, iterate through all the columns
            Iterator<Cell> cellIterator = row.cellIterator();

            cellValues = API.getCellValues(row);
            size = cellValues.size();
            switch (cellValues.get(2).charAt(0)) {
                case ('o'):
                    object = new Objects(cellValues.get(2), cellValues.get(0).charAt(0), cellValues.get(cellValues.size() - 1).charAt(0));
                    objects.add(object);
```

All files are up-to-date (3 minutes ago)


File Edit View Navigate Code Refactor Build Run Tools VCS Window Help
Project_java_final › src › main › java › Package_one › Apache_poi › run
Controller.java Main.java Main_Application.java Objects.java Apache_poi.java API.java Fields.java
Hello!
object5
field15
Next
Open
Run: Main
Version Control TODO Problems Terminal Build Dependencies Run
All files are up-to-date (4 minutes ago)
28:9 CRLF UTF-8 4 spaces

```
public static Vector<Objects> run (String filepath) {
    int size = 0;
    int index = 0;
    char ch = 'a';
    Vector<String> cellValues;
    Vector<Objects> objects = new Vector<Objects>();
    Objects object;

    try {
        FileInputStream file = new FileInputStream(new File(filepath));

        //Create Workbook instance holding reference to .xlsx file
        XSSFWorkbook workbook = new XSSFWorkbook(file);

        //Get first/desired sheet from the workbook
        XSSFSheet sheet = workbook.getSheetAt( index: 0);

        //Iterate through each rows one by one
        Iterator<Row> rowIterator = sheet.iterator();
        while (rowIterator.hasNext()) {
            int i = 0;
            Row row = rowIterator.next();
            //For each row, iterate through all the columns
            Iterator<Cell> cellIterator = row.cellIterator();

            cellValues = API.getCellValues(row);
            size = cellValues.size();
            switch (cellValues.get(2).charAt(0)) {
                case ('o'):
                    object = new Objects(cellValues.get(2), cellValues.get(0).charAt(0), cellValues.get(cellValues.size() - 1).charAt(0));
                    objects.add(object);
```


File Edit View Navigate Code Refactor Build Run Tools VCS Window Help
Project_java_final › src › main › java › Package_one › Apache_poi › run
Controller.java Main.java Main_Application.java Objects.java Apache_poi.java API.java Fields.java
Hello!
Done
Done
Next
Open
Run: Main
Version Control TODO Problems Terminal Build Dependencies Run
All files are up-to-date (4 minutes ago)
28:9 CRLF UTF-8 4 spaces

```
public static Vector<Objects> run (String filepath) {
    int size = 0;
    int index = 0;
    char ch = 'a';
    Vector<String> cellValues;
    Vector<Objects> objects = new Vector<Objects>();
    Objects object;

    try {
        FileInputStream file = new FileInputStream(new File(filepath));

        //Create Workbook instance holding reference to .xlsx file
        XSSFWorkbook workbook = new XSSFWorkbook(file);

        //Get first/desired sheet from the workbook
        XSSFSheet sheet = workbook.getSheetAt( index: 0);

        //Iterate through each rows one by one
        Iterator<Row> rowIterator = sheet.iterator();
        while (rowIterator.hasNext()) {
            int i = 0;
            Row row = rowIterator.next();
            //For each row, iterate through all the columns
            Iterator<Cell> cellIterator = row.cellIterator();

            cellValues = API.getCellValues(row);
            size = cellValues.size();
            switch (cellValues.get(2).charAt(0)) {
                case ('o'):
                    object = new Objects(cellValues.get(2), cellValues.get(0).charAt(0), cellValues.get(cellValues.size() - 1).charAt(0));
                    objects.add(object);
```