



# UNIVERSIDAD DE LAS FUERZAS ARMADAS ESPE



**CLASS NAME: OBJECT ORIENTED  
PROGRAMMING**

**TEACHER: EDISON LASCANO**

**NRC:14575**

**WORKSHOP # 21**

**TOPIC: Exam Inspection**

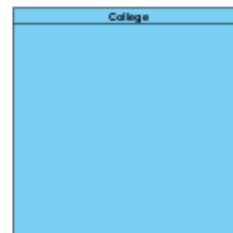
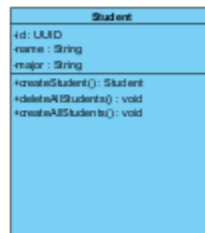
**NAME: CARLOS ÑATO**

Inspector: Carlos Ñato

- 1) class modeling 7/10 pts.  
Q33(main) 2/2  
Vehicle class: 1/1, attributes: 1/1, method: 1/1  
FileManager 2/2  
dependencies 0/3
  - 2) Running program 10/10 pts.  
Run the program e input data, and see if the program has a menu  
data input 5/5  
menu option 5/5
  - 3) Printing/counting/deleting objects from JSON File 10/10 pts.  
print, count, delete 10/10
  - 4) Saving JSON data 10/10pts.  
screenshot of Json File: data are added 10/10
  - 5) Code Quality 10/10 pts.
- TOTAL: .....47/50 pts.

#### Evidence

- 1) class modeling 8:02



#### 2) Running program

```
Output - OOPExam (run)

Do you want to delete all the objects created?

1. Create students
2.Delete all students
3.Quit

1
||Create a new student||
Insert the student's name:

Carlos
Insert the student's major:
```

#### 3) Printing/counting/deleting objects from JSON File

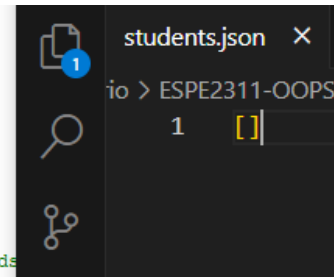
Do you want to delete all the objects created?

1. Create students
2. Delete all students
3. Quit

2

students deleted

BUILD SUCCESSFUL (total time: 15 minutes 11 seconds)



#### 4) Saving JSON data

```
{
  "id": "e03dca66-db39-4837-8333-5f139edbbb78",
  "name": "Carlos Nato",
  "major": "Software engineering"
},
{
  "id": "ebd7fe8e-78a4-4635-8df7-ffff8baafe26",
  "name": "Carlos Nato",
  "major": "Software engineering"
},
{
  "id": "7cd1497-852a-44aa-beb0-e2a5fac47b95",
  "name": "Pablo Domingues",
  "major": "Biotechnology engineering"
},
{
  "id": "97e9b4ee-5573-4970-9fe1-d23427704210",
  "name": "Juan Granda",
  "major": "Softwarw engineering"
},
{
  "id": "91bdbaa7-47bb-48f5-97fc-5cace4027250",
  "name": "Sebastian Criollo",
  "major": "Civil engineering"
}
```

#### 5) Code Quality

```
public class FileHandler {

    public static <T> ArrayList<T> readFile(String fileAddress, Type type) {

        File theFile = new File(pathname: fileAddress);
        ArrayList<T> objectList = new ArrayList<>();

        if (theFile.exists()) {

            try (FileReader fileReader = new FileReader(filename: fileAddress)) {
                Geon geon = new GeonBuilder().setPrettyPrinting().create();

                objectList = gson.fromJson(json: fileReader, type: type);
            } catch (FileNotFoundException e) {
                System.err.println("Error in creating the File Reader Object");
            } catch (IOException e) {
                throw new RuntimeException("Error: " + e);
            }

        } else {
            writeFile(fileAddress, objectList);
        }

        return objectList;
    }
}
```