

# UNIVERSIDAD DE LAS FUERZAS ARMADAS - ESPE

DEPARTAMENTO DE CIENCIAS DE LA COMPUTACIÓN  
OBJECT ORIENTED PROGRAMMING  
NRC: 9652

## WORKSHOP #12

DATE: 06/06/2023

DUE: 11pm

### Rubric

#### Presentation

0.- GitHub	/100
1.- Interview and Presentation	/10      9:20 - 9:25
2.- Project definition	/10
3.- Software Requirements	/10
4.- Use Case	/10
5.- Class Diagram	/10
6.- Data files	/10
7.- Execution	/10
8-10.- Clean Code	/30
TOTAL	/100

### Evidence

#### GitHub

- 1.- Interview and Presentation
- 2.- Project definition
- 3.- Software Requirements
- 4.- Use Case
- 5.- Class Diagram
- 6.- Data files
- 7.- Execution
- 8-10.- Clean Code

Team 1:

Project's name:

Leader:

GitHub:

Inspector: Team ,

Interview video:

1. BAEZ JARAMILLO GABRIEL ALEJANDRO
2. CALDERÓN CALVA JIMAR JHOEL
3. CALVACHE BONIFAZ GABRIEL ALEXANDER
4. CASIGNIA RUIZ DIEGO ALEJANDRO

Presentation: 8/10

### Rubric

Presentation

0.- GitHub	/100
1.- Interview and Presentation	10/10 9:25 - 9:30
2.- Project definition	8/10 9:30 - 9:35
3.- Software Requirements	7.5/10 9:35 - 9:45
4.- Use Case	7/10 9:45 - 9:50
5.- Class Diagram	6/10 9:50 - 10:00
6.- Data files	9/10 10:00 - 10:20
7.- Execution	6/10
8-10.- Clean Code	17/30
TOTAL	/100

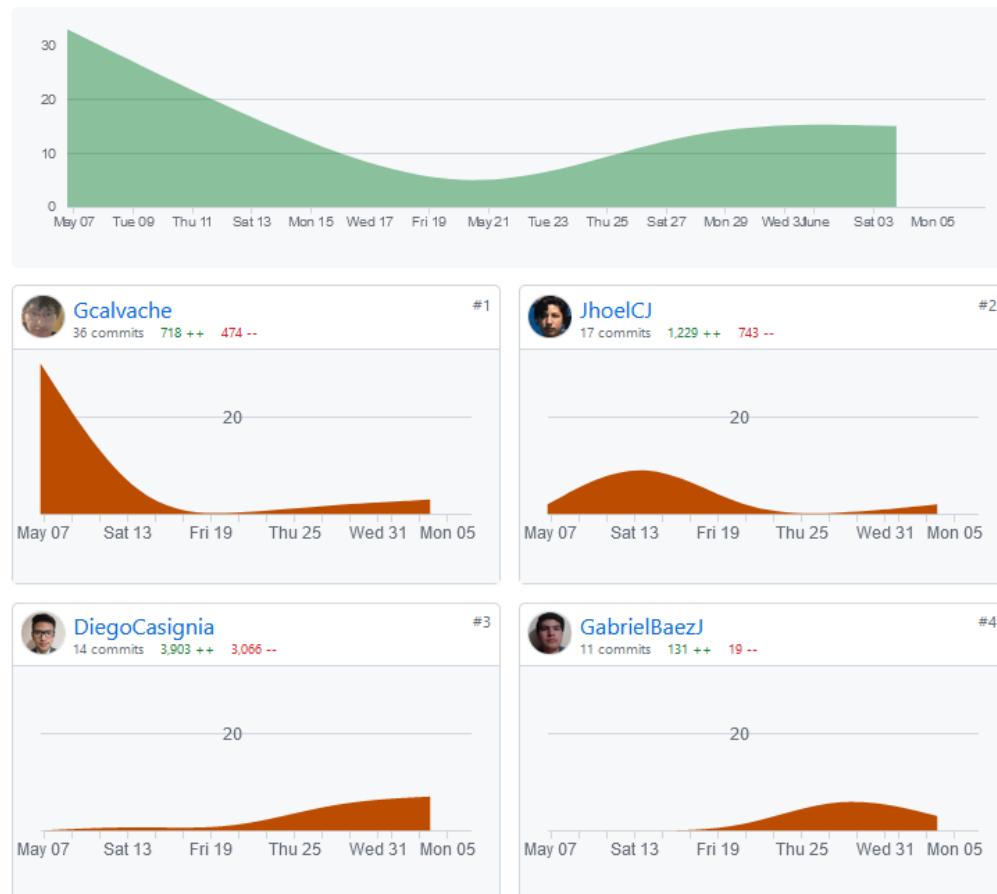
### Evidence

GitHub

May 7, 2023 – Jun 7, 2023

Contributions: Commits ▾

Contributions to main, excluding merge commits and bot accounts



## 1.- Interview and Presentation



### Video Requerimientos

No listado



Calderon Jilmar  
5 suscriptores

Suscribirse

0

0

Compartir

Guardar

...

## 2.- Project definition

**Client:** "Panes de la Rumiñahui"

### PROBLEM

A program is needed that keeps a record of the hours of work and sales made (Money entered) by employee. The user needs help to organize the hours that each employee works and the earnings that each one generates. Sales are made through payments in cash, credit/debit card or electronic banking. And employees must announce the time they start work as well as when they finish.

### GENERAL DESCRIPTION

It is important to have an organized record of the hours that the employees work, since in this way you can have a good work environment without major problems, if any, how do you have the record of the employees with their respective entry times and output in addition to the sales they have made, you can call someone's attention without making false accusations.

### BACKGROUND

A system that keeps the hours and income organized with the respective person in charge at that time in order to optimize sales and improve the income of the "Panes de la Rumiñahui" establishment. Employees need to enter hours that do not conflict with others in such a way that their times are optimized, which will generate that "Panes de la Rumiñahui" have more lively and productive employees when doing their work.

## 3.- Software Requirements

#### **2.1.2 User Interfaces**

The user interface must be clear, concise and legible so as not to generate confusion or errors when entering the necessary data. Likewise, it must include aids so that the user knows how to handle it correctly. Have a simple but functional design.

##### **2.1.3 Hardware Interfaces**

The application must be compatible with keyboard and mouse for interaction and input of information.

##### **2.1.4 Software Interfaces**

This must include the options to enter entry and exit times. Register the products sold, the payment method used and the income generated from the sale, as well as register the employee who made this transaction. It must include a Login option to differentiate between employees and administrative staff. In the case of administrative personnel, they will have an option to enter the information of each employee and thus keep a record of their activities.

#### **2.2 Product functions**

The program proposes an option so that administrative staff can have better control over the quality of work of employees. Through the control of their working hours, products sold and the profits they generate.

#### **2.3 User Characteristics**

The user to whom we are addressing is the owner of a bakery who seeks to renew his business with the help of new technologies. The user requires software that allows him to control sales and the working hours of his workers

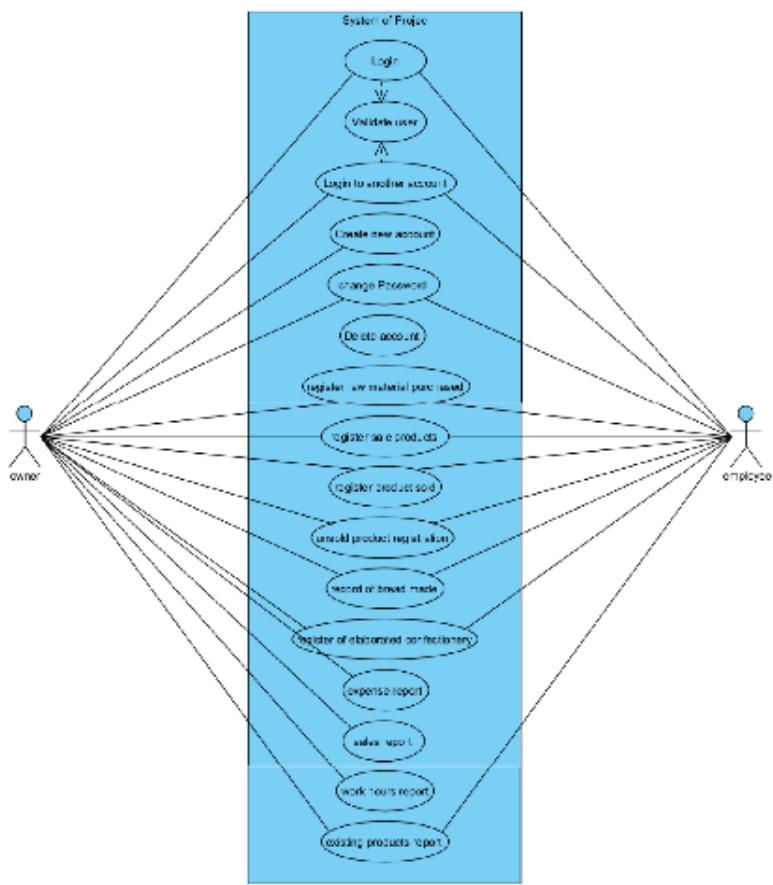
#### **2.4 Restrictions**

Employees cannot have access to the information collected by the program, much less be able to manipulate said information. Only the business owner will have access to this information.

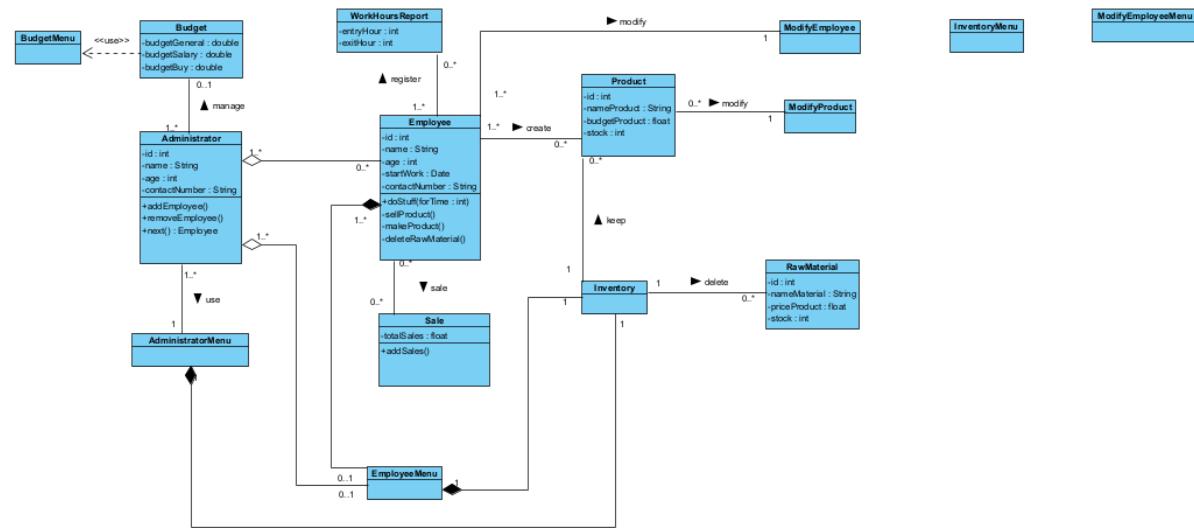
### **3. SPECIFIC REQUIREMENTS**

This section specifies the system requirements

## **4.- Use Case**



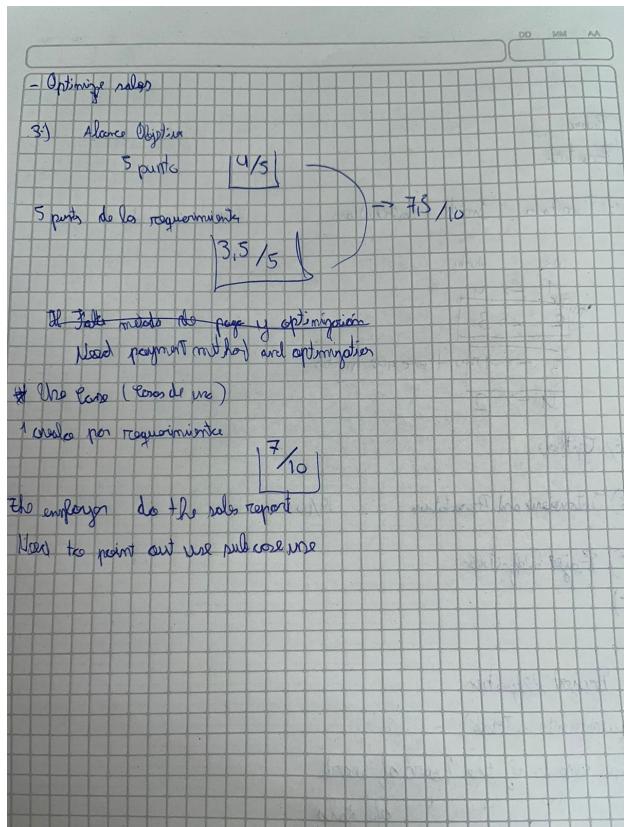
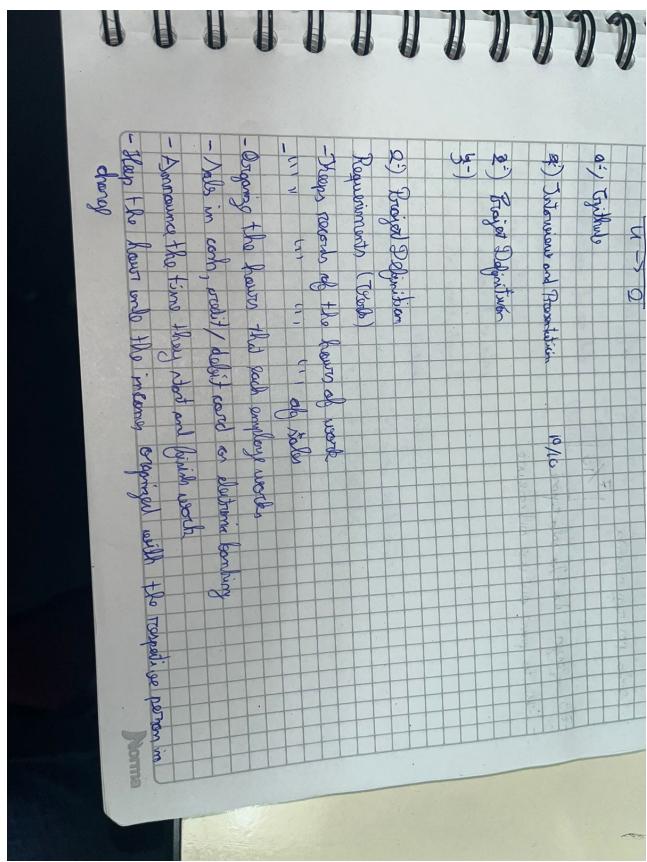
## 5.- Class Diagram

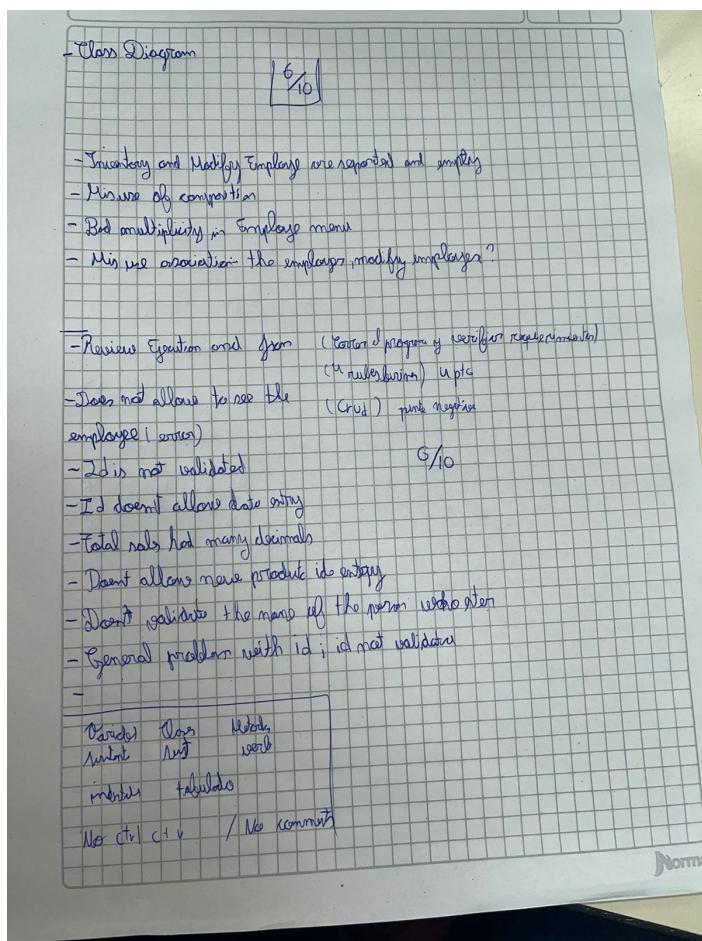


## 6.- Data files

---

```
{  
    "argument": "Salario",  
    "amount": 500.0  
},  
{  
    "argument": "Luz",  
    "amount": 110.0  
},  
{  
    "argument": "Agua",  
    "amount": 15.0  
},  
{  
    "argument": "Factura",  
    "amount": 20.0  
},  
{  
    "argument": "Devolucion",  
    "amount": 8.0  
}
```





## 7.- Execution

--- System by Techware ---

Menu:

1. Administrador
2. Empleado
3. Salir

Ingrese una opcion: 2

1. Ingrese la hora de entrada/salida:
2. Ver inventario:
3. Modificar inventario:
4. Registrar venta:
5. Mostrar Ventas:
6. Salir:

Ingrese una opcion: 5

Lista de ventas

Venta 1: 1.24  
 Venta 2: 8.95  
 Venta 3: 10.0  
 Venta 4: 3.6

1. Ingrese la hora de entrada/salida:
2. Ver inventario:
3. Modificar inventario:
4. Registrar venta:
5. Mostrar Ventas:
6. Salir:

## 8-10.- Clean Code

- In the class "EditAdministratorData" there is an operation employee.
- In the class "EditBudgetData" there is a commented code.
- In the class "Budget" the names of operators are in UpperCamelCase.
- In the class "Inventory" the names of operators are not verbs.
- some classes are not in the correct package
- In the class "AdministratorMenu" the name of an operator is not a verb.
- In the class "BudgetMenu" the name of an operator is not a verb.
- In the class "EmployeeMenu" the name of an operator is not a verb.
- In the class "InventoryMenu" the name of an operator is not a verb.
- In the class "EmployeeMenu" the name of an operator is not a verb.
- In the class "Sale" the attribute is in plural..
- The class "WorkHoursReport" is in plural.
- In the class "ValidationUntil" the boolean operator name is not in UpperCamelCase.

Team 1: Techware

Project's name: Panes de la Rumiñahui

Leader: Jilmar Calderon

GitHub: <https://github.com/JhoelCJ/OOP9652-Techware.git>

Inspector: Team 3 , Paul Moreno

Interview video:<https://www.youtube.com/watch?v=pNf69I-VZgA>

5. CEDEÑO MONTOYA RONY STIVEN
6. GALARZA VILLALVA CESAR LUIS
7. LUDEÑA QUICHIMBO EDISON WILFRIDO
8. MIRANDA CREAMER ALISON SOLANGE

Presentation: 8/10

#### **Rubric**

Presentation

0.- GitHub	/100
1.- Interview and Presentation	/10
2.- Project definition	/10
3.- Software Requirements	/10
4.- Use Case	/10
5.- Class Diagram	/10
6.- Data files	/10
7.- Execution	/10
8-10.- Clean Code	/30
TOTAL	/100

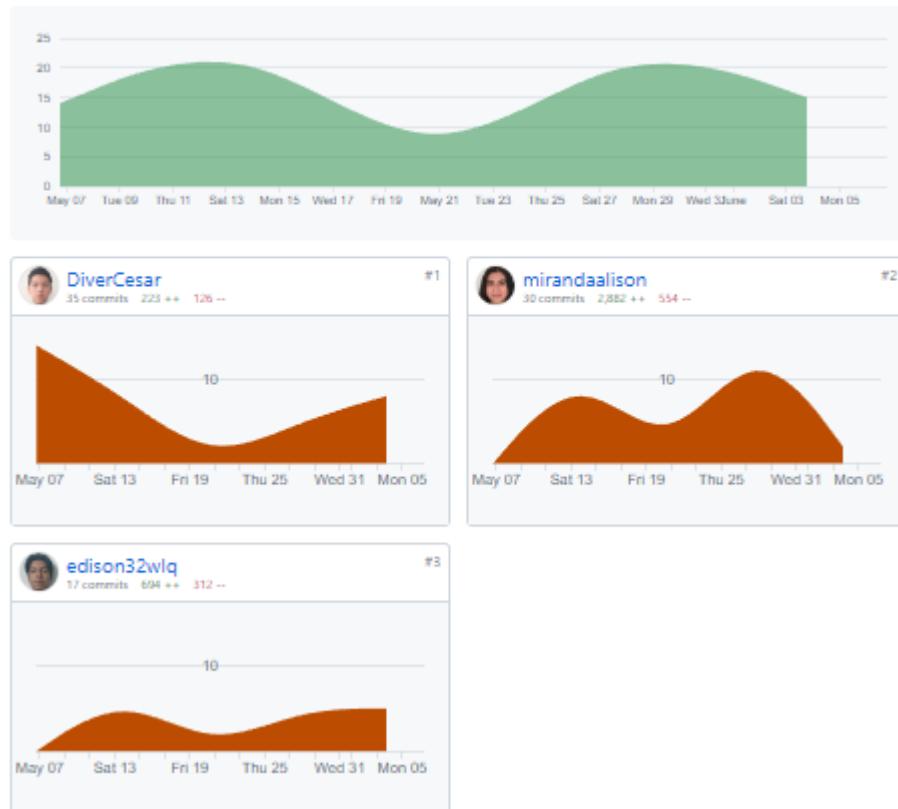
#### **Evidence**

GitHub

May 7, 2023 – Jun 7, 2023

Contributions: [Commits](#) ▾

Contributions to main, excluding merge commits and bot accounts



## 1.- Interview and Presentation



## 2.- Project definition

9/10

## 3.- Software Requirements

6/10

programming becomes possible, there is a vision of the product's own cloud for higher level companies, coming to be considered a collaborative workspace among several team members with greater and more agile data manipulation. Even so, in this version there are requirements that will be implemented in the future, either by changing parameters in the code due to obsolescence, optimization of both execution and storage and continuous maintenance of errors and bugs.

### 3. Specific requirements

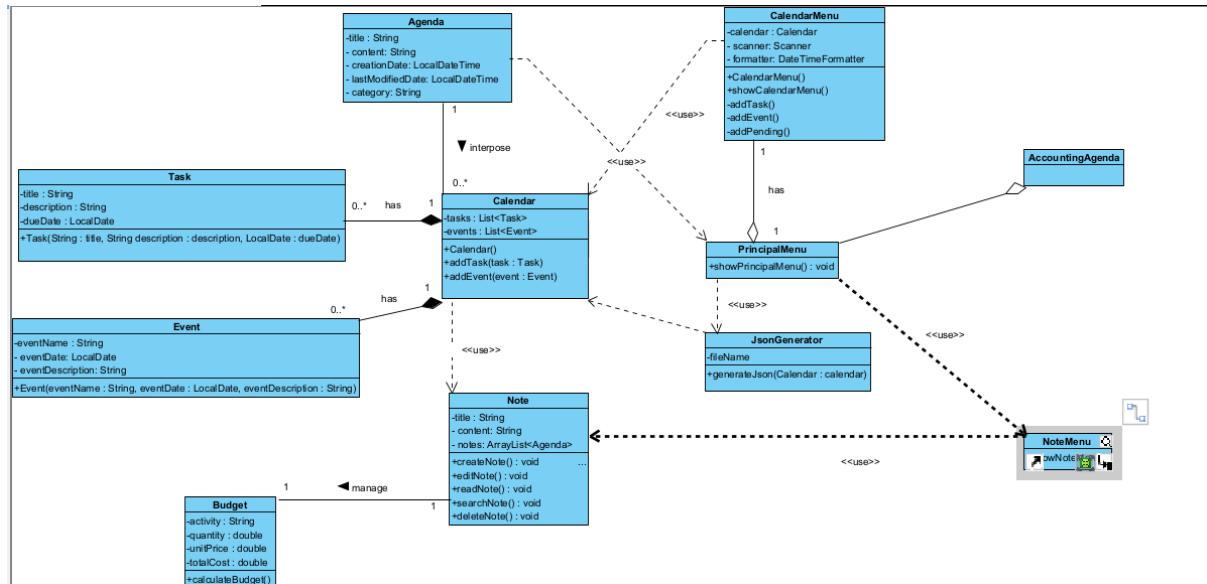
For the correct fulfillment of the requirements of the product "my accounting agenda" (codename of the project), it will be necessary for the developers to be fully committed to good programming, to maintain the confidentiality of the product until the maintenance phase and to

### 4.- Use Case

0/10

### 5.- Class Diagram

5/10



### 6.- Data files

0/10

OOP9652-BugBusters > 06-Code > AccountingAgenda				
	Name	Date modified	Type	Size
...	build	6/7/2023 9:36 AM	File folder	
...	nbproject	6/7/2023 9:36 AM	File folder	
...	src	6/7/2023 9:36 AM	File folder	
...	build	6/7/2023 9:39 AM	XML Document	4 KB
n				

## 7.- Execution

5/10

```
**** NOTAS DISPONIBLES ****
```

Título: JOse

Contenido: SIMon

Categoría: Estudio

Fecha de Creación: 2023-26-07 10:26:35

Fecha de Última Modificación: 2023-26-07 10:26:35

----- MENU DE NOTAS -----

1. Crear Nota
2. Editar Nota
3. Ver Nota
4. Buscar Nota
5. Borrar Nota
6. Volver al Menú Principal

Ingrese la opción que desea visualizar: asd

Error: La entrada 'asd' no es un número válido.

----- MENU DE NOTAS -----

1. Crear Nota
2. Editar Nota
3. Ver Nota
4. Buscar Nota
5. Borrar Nota
6. Volver al Menú Principal

Ingrese la opción que desea visualizar: |

8-10.- Clean Code

Team 2: BugBusters

Project's name: My accounting agenda

Leader: Galarza Villalva César Luis

GitHub: <https://github.com/DiverCesar/OOP9652-BugBusters.git>

Inspector: Team 4

Interview video: <https://youtu.be/84g3a5Y1dzk>

9. MORENO NAVARRETE PAUL SEBASTIAN

10. PASQUEL RUIZ JUAN DAVID

11. RAMOS YANCHALIQUIN SEGUNDO JAVIER

12. RUEDA VILATUÑA JUAN SEBASTIAN

Presentation: 5/10

### Rubric

Presentation

0.- GitHub	/100
1.- Interview and Presentation	10/10
2.- Project definition	8/10
3.- Software Requirements	6/10
4.- Use Case	6/10
5.- Class Diagram	5/10
6.- Data files	3/10
7.- Execution	4/10
8-10.- Clean Code	/30
TOTAL	/100

### Evidence

GitHub

May 14, 2023 – Jun 7, 2023

Contributions: Commits ▾

Contributions to main, excluding merge commits and bot accounts



## 1.- Interview and Presentation



## 2.- Project definition

### ANALYST COMPARATION

To avoid these problems, a system has been planned to help the hardware store keep the stock of its products in the warehouse under control.

The system consists of a program where the respective employee has to enter his/her data such as his/her name, ID and job title that he/she employs. Then the system will give you access to the inventory program.

In the next step the program will display the menu with the following options:

- Registration of stock of items
- Add new items
- Remove items
- Log out of the system
- 

In the options to add and remove items the employee has to make a specification, in item registration for example if the addition was by purchase or return in the case of removing an example would be sales or expiration.

The system can be kept open until the employee decides to close it with the option to Exit the System

With this the hardware store will have its own system where they will know which items, they have in possession to ensure sales.

## 3.- Software Requirements

### 3 Specific Requirements

#### 3.1. External Interfaces

The system will be divided into three columns with the product titles, another one for inputs and outputs, in each of these columns the product code, price, description and quantity can be viewed.

In the products column are the items that are in the warehouse, in inputs are the items that are about to arrive at the warehouse and outputs are the products that are leaving the warehouse.

#### 3.2. Functions

##### User Registration and Login:

Allow operators to create an account by registering their personal information, such as name, ID, and password.

This function ensures authentication and security by controlling operators' access to the system.

##### Inventory Management:

Track and record incoming and outgoing stock.

Update inventory records.

Maintain accurate information about the quantity and location of each item in the warehouse.

Monitor stock levels and generate alerts when items reach predefined thresholds.

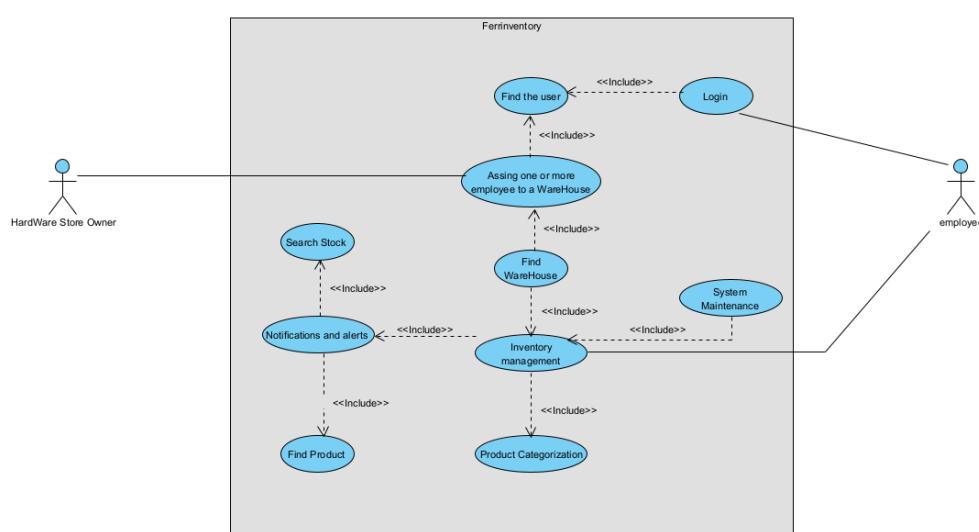
##### Product Categorization:

Categorize products based on type, brand, ID.

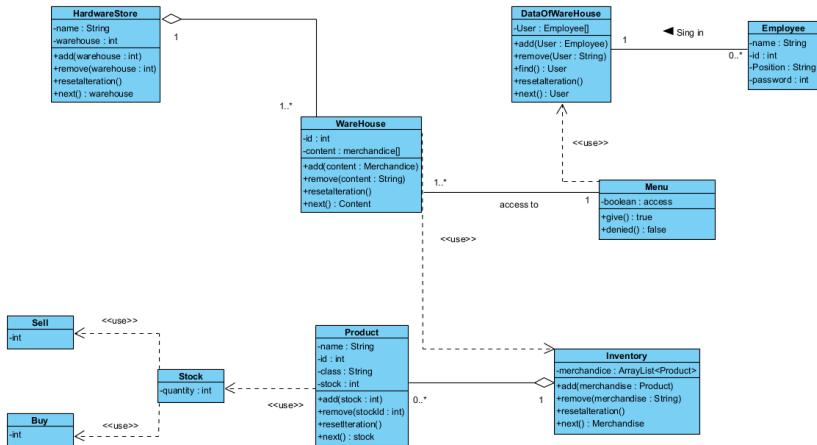
Assign unique identifiers to each product for easy identification and retrieval.

Create product hierarchies or groupings to organize items efficiently.

## 4.- Use Case



## 5.- Class Diagram



## 6.- Data files

```

products.json
1  {
2    "Id": 1,
3    "products": [
4      {
5        "id": "25-B",
6        "name": "Martillo",
7        "category": "manual",
8        "subcategory": "madera",
9        "brand": "dewalt",
10       "cost": 21.85,
11       "price": "29,13",
12       "stock": 0
13     }
14   ]
15 }
16
17 "Id": 2,
18 }

WareHouse#1.json
1  {
2    "Id": 1,
3    "products": [
4      {
5        "id": "1",
6        "name": "del producto",
7        "category": "del producto",
8        "subcategory": "de que",
9        "brand": "ACNE",
10       "cost": 15.52,
11       "price": "20,69",
12       "stock": 34
13     }
14   ]
15 }

WareHouse#2.json
1  {
2    "Id": 2,
3    "products": [
4      {
5        "id": "DE-E",
6        "name": "Destornillador",
7        "category": "Estrella",
8        "subcategory": "Manual",
9        "brand": "Jem",
10       "cost": 12.5,
11       "price": "16,67",
12       "stock": 0
13     }
14   ]
15 }

```

1. evalua por requerimientos  
 depende uso - create  
 otras multitud de  
 funcionalidades
- SPts 0 → estructura adecuada  
 IEEE 936  
 UML  
 FUP  
 festu negocio TP / CHP 16
2. inventory control  
 customer satisfaction  
 op. external efficiency  
 → register stock of items  
 add items  
 remove items  
 log out ✓  
 exit
3. estructura  
 structure  
 → (desorden)  
 → desorganization  
 (no hay referencias) no references  
 functions doesn't show dependencies  
 no JSON  
 inventory management? < add > one option  
 categorization  
 no diagrams (use cases, class)
4. faltan objetos  
 it has all actions beside (add, remove) assume  
 its implied in inventory management  
 no log out
5. 10 classes ✓ → 2 P → not specialized attributes  
 puts methods as classes → 2  
 -1 → association no tiene dirección
- 6.
7. no exceptions -1  
 no friendly interface -1  
 to string sin modificar -1  
 doesn't print report -1 (generates but displays error)  
 function 2 obsolet -1  
 3. json

mañana 6am notas  
 en ca  
 código mal organizado p/paquete clean code

## 7.- Execution

```

Output - Ferrinventory (run)
▶ run:
<----BIENVENIDO A FERRINVENTORY---->
▶ Que deseas hacer ?
▶   1. Agregar productos
▶   2. Imprimir reporte de inventario
▶   3. Salir

▶ 1
<----BIENVENIDO A FERRINVENTORY---->
▶ Escoja la Bodega:
▶   1. Bodega #1
▶   2. Bodega #2
▶   3. Salir

▶ 1
-----Bodega#1 -----
Nombre:Navaja Suiza
Id: DE-23
Categoria: Navajas
Sub Categoria: Suizas
Marca: Victorinox
Stock:3
Costo de compra(usar coma):23,78
{
  "Id": 1,
  "products": [
    {
      "id": "DE-23",
      "name": "Navaja Suiza",
      "category": "Navajas",
      "subCategory": "Suizas",
      "brand": "Victorinox",
      "cost": 23.78,
      "price": "31,71",

```

## 8-10.- Clean Code

Team 3: D-Encoders

Project's name: Ferrinventory

Leader: Moreno Paul

GitHub: <https://github.com/PaulMoreno21/OOP9652-D-Encoders.git>

Inspector: Team 2

Interview video: <https://www.youtube.com/watch?v=JE3UJ5R6xi4>

- 13. SANMARTIN GALAN JOSE MIGUEL
- 14. SIMBAÑA RIVADENEIRA MICHAEL STEVEN
- 15. TIPAN MOREIRA OSWALDO JACINTO
- 16. ZURITA ROSERO PABLO ESTEBAN

Presentaion: 7.7/10

## Rubric

### Presentation

0.- GitHub	/100
1.- Interview and Presentation	10/10
2.- Project definition	10/10
3.- Software Requirements	8/10
4.- Use Case	7/10
5.- Class Diagram	8/10
6.- Data files	6/10
7.- Execution	4/10
8-10.- Clean Code	/30
TOTAL	/100

### Evidence

## GitHub

May 14, 2023 – Jun 7, 2023

Contributions: Commits ▾

Contributions to main, excluding merge commits and bot accounts



ImaGaf

26 commits 1,445 ++ 560 --

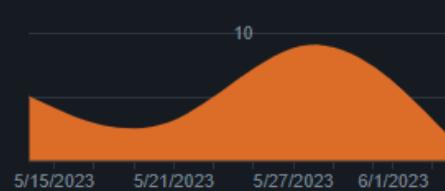
#1



SanmartinJose

20 commits 2,556 ++ 543 --

#2



ZuritaPablo

10 commits 253 ++ 25 --

#3



Stevven23

8 commits 533 ++ 197 --

#4



## 1.- Interview and Presentation



## 2.- Project definition

OOP9652-OOP-ERATION-GOSLING / 01-Definition / ProblemDescription.pdf

SanmartinJose Definition V0.2 4b9439d - last week History

203 KB

Management system to control tutoring, teachers and student progress of a business that provides educational and holistic services to early childhood children "Magic Place"

**Problem**

The team aims to create a user management system to control tutoring, teachers and student progress of a business that provides educational and holistic services to early childhood children "Magic Place". Its owner told us that she schedules appointments with her clients to provide help in the early education of their children, and that she works together with a group of teachers who carry out the same activity, however, she continues to do so with an agenda, schedules and charges as well. It performs them manually, our objective is to find a way to facilitate our client's registration of these, the charges and the schedules so that the service is more efficient and improves for their clients.

**Overview**

Magic Place is an organization dedicated to providing personalized educational services, with a special focus on learning at home for preschool-age children. Recognizing the importance of an efficient organizational structure, we strive to provide optimal planning that allows students to acquire all the necessary knowledge and, if necessary, reinforce the acquired skills.

Our business focuses on the implementation of specialized software to optimize learning activities at home. Working closely with highly trained professionals, our services are delivered directly to clients' homes, on specific days of the week, and

## 3.- Software Requirements

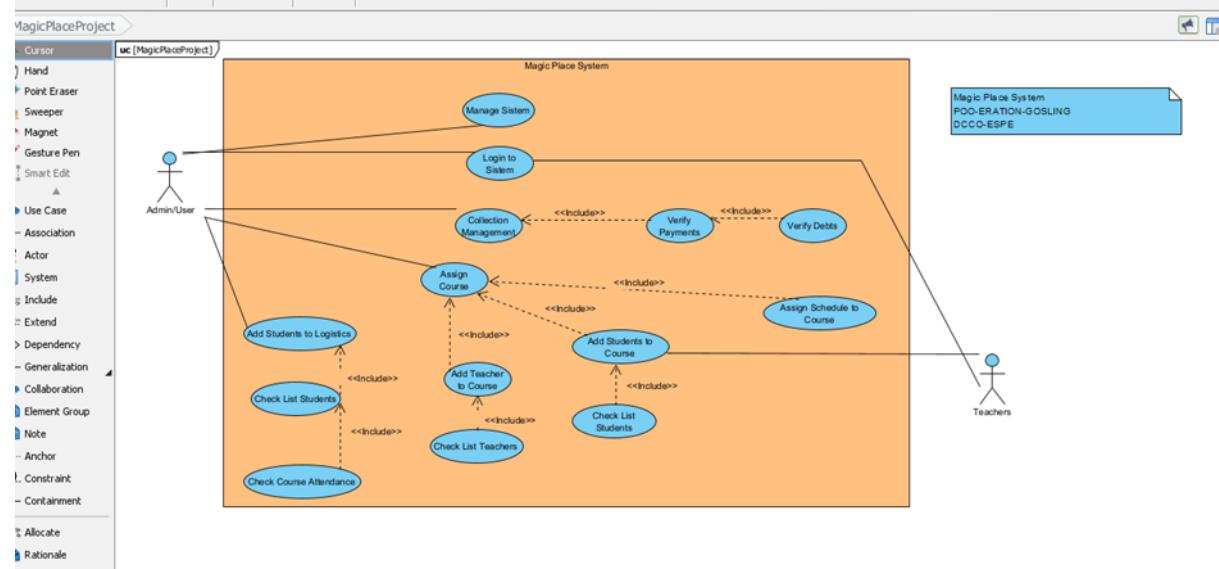
<b>Priority of the requirement:</b>
High

<b>Identification of the requirement:</b>	RF02
<b>Name of the requirement:</b>	Add new HolisticStudent
<b>Characteristics:</b>	The new student will be upload to the database
<b>Description of the requirement:</b>	The manager will be able to add a new Holistic Student
<b>Priority of the requirement:</b>	
High	

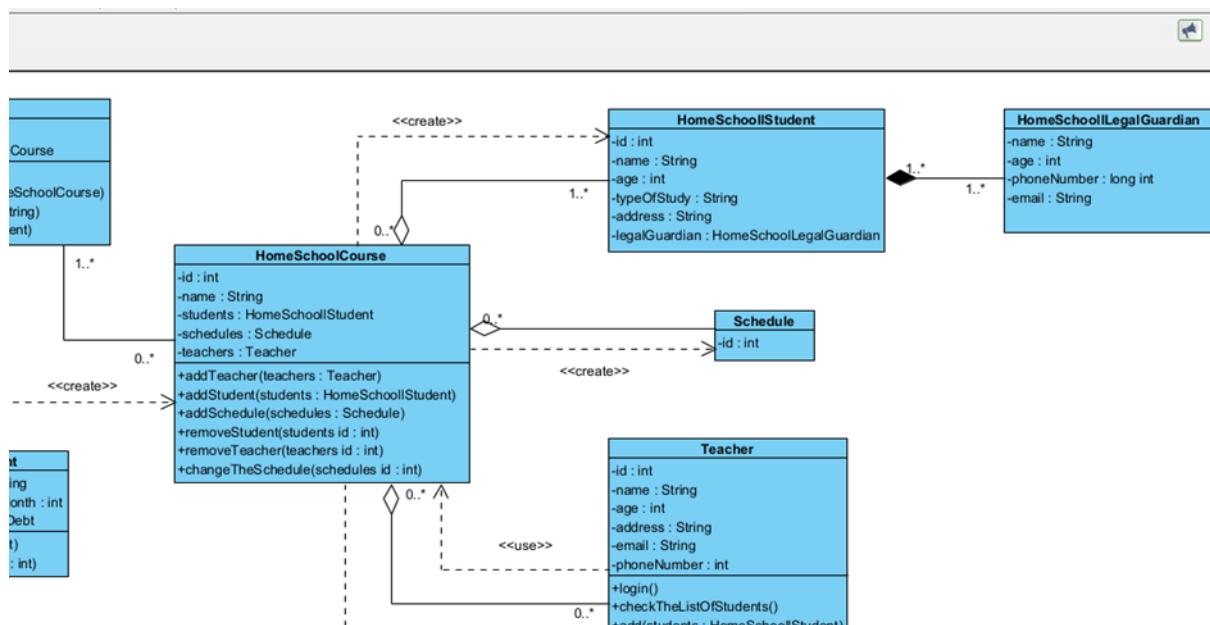
<b>Identification of the requirement:</b>	RF03
<b>Name of the requirement:</b>	Add a new Teacher
<b>Characteristics:</b>	The teacher will be upload to the database
<b>Description of the requirement:</b>	The manager will be able to upload a new teacher every time he wants
<b>Priority of the requirement:</b>	
High	

<b>Identification of the requirement:</b>	RF04
<b>Name of the requirement:</b>	

#### 4.- Use Case



#### 5.- Class Diagram



## 6.- Data files

SOFTWARE > POO > REVISION > OOP9652-OOP-ERATION-GOSLING > OOP9652-OOP-ERATION-GOSLING > 06-Code > MagamentSystem > data			
Nombre	Fecha de modificación	Tipo	Tamaño
debts	7/6/2023 10:08	Archivo JSON	1 KB
help	7/6/2023 10:08	Archivo JSON	1 KB
holisticLegalGuardian	7/6/2023 10:08	Archivo JSON	1 KB
holisticStudents	7/6/2023 10:08	Archivo JSON	1 KB
homeSchoolStudents	7/6/2023 10:08	Archivo JSON	1 KB
studentList	7/6/2023 10:08	Archivo JSON	2 KB

## 7.- Execution

The screenshot shows the Apache NetBeans IDE interface with the MagamentSystem project open. The left pane displays the project structure, showing packages for controllers and views, and various Java source files. The right pane shows the output window for the run configuration. The output text is as follows:

```

run:
-----Sistema de administraci n de horarios-----
1. Administrar cursos del HomeSchool
2. Administrar estudiantes de Hol stica
3. Administrar pagos
4. Salir

Seleccione una opci n: 1
-----Administraci n del HomeSchool-----
1. Administrar Estudiantes
2. Administrar horarios
3. Administrar notas
4. Regresar

Seleccione una opci n:
|
```

```
Output - MagamentSystem (run)

run:
-----Sistema de administraci n de horarios-----
1. Administrar cursos del HomeSchool
2. Administrar estudiantes de Hol stica
3. Administrar pagos
4. Salir

Seleccione una opci n: A
Exception in thread "main" java.util.InputMismatchException
|   at java.base/java.util.Scanner.throwFor(Scanner.java:947)
|   at java.base/java.util.Scanner.next(Scanner.java:1602)
|   at java.base/java.util.Scanner.nextInt(Scanner.java:2267)
|   at java.base/java.util.Scanner.nextInt(Scanner.java:2221)
|   at ec.edu.espe.managementsystem.view.Menu.main(Menu.java:39)
C:\Users\usuario\AppData\Local\NetBeans\Cache\17\executor-snippets\run.xml:111: The following error occurred while executing this line:
C:\Users\usuario\AppData\Local\NetBeans\Cache\17\executor-snippets\run.xml:68: Java returned: 1
BUILD FAILED (total time: 53 seconds)
```

## 8-10.- Clean Code

Team 4:OPP-ERATION-GOSLING

Project's name:Magic Plaza System

Leader: Jos  M guel Sanmart n Galan

GitHub: <https://github.com/SanmartinJose/OOP9652-OOP-ERATION-GOSLING>

Inspector: Team 1, Jilmar Calderon

Interview video: <https://www.youtube.com/watch?v=eipAkdQqw9g>

		Dia	Mes	Año	ESTILO®
► GitHub	1/10				
► Interview and Presentation	10/10				
► Project Definition	10/10				
► Software Requirements	8/10				
► Use Case	7/10				
► Class Diagram	8/10				
► Data Files	6/10				
► Execution	4/10				
► Clean code	130				
Total	1/100				

### - Project Definition

- System that can control educational progress
- Can schedule appointments with her clients (teacher, student, parents)
- Control an agenda
- Register the charges and schedules automatically
- Control pay
- Is consistent with presentation

### - Requirements

- Don't have a function to control the progress
- Can't schedule appointment with parents

### - Use Case

Add Student to logistic is not in the Requirements

No interaction with parents

Manage System → Grammatical Error  
 Login to System → Grammatical Error

Manage System  
 Login to System

### → Class Diagram

- Gramatical Error in class HomeSchool Student, call HomeSchool Legal Guardian → Correct name is HomeSchool Legal Guardian
- Interaction with Parents, wasn't mentioned in Requirements or UseCases

### → Data Files

- Missing 4 Json Files.

### → Execution

- Program crash with letter in option, principal menu, no validation
- Program <sup>crash</sup> each menu with letter data.
- Student Management menu don't have a specific action about what & need to enter
- Program accept negative numbers in data request. of bar in data
- Bad registration of information
- There's not a clean display of information when letters have accents.