



Universidad de las Fuerzas Armadas

**CLASS NAME: OBJECT ORIENTED
PROGRAMMING
LASCANO**

NRC: 14575

TOPIC: COLLECTIONS

TEACHER: EDISON

HOMEWORK #: 8

- DAVID GUSTAVO CEPEDA SALGUERO

chickens - Excel

Algunas características del libro se pueden perder si lo guarda como CSV (delimitado por comas). Para conservar estas características, guárdelo como archivo de Excel.

	A	B	C	D	E	F	G	H	I
1	6	Hilda,White,2022-01-21,1,true							
2	7	Florida,Black,2021-04-16,2,true							
3	8	Ulises,Black&White,2019-11-16,4,false							
4	9	Kleiver,Brown,2019-12-31,3,true							
5	10	Rolita,White,2022-12-29,0,true							
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Projects: ChickenFarm

Source Packages: eceduspe.chicken, Chicken.java, ChickenCoop.java, ChickenFarmer.java, Egg.java, Poop.java, eceduspe.chicken, ChickenFarmSim

```
private static void showChickens(Chicken[] chickens) {
    System.out.println("Details of the chickens:");
    for (Chicken c : chickens) {
        if (c != null) {
            System.out.println(c.toString());
        }
    }
}

private static void saveToCSV(Chicken[] chickens) {
    try (PrintWriter writer = new PrintWriter(new FileWriter("chickens.csv"))) {
        for (Chicken c : chickens) {
            if (c != null) {
                writer.println(c.toCSV());
            }
        }
    }
}
```

Output: ChickenFarmSim (run)

```
Details of the chickens:
Chicken(id=6, name=Hilda, color=White, age=1, isMolting=true)
Chicken(id=7, name=Florida, color=Black, age=2, isMolting=true)
Chicken(id=8, name=Ulises, color=Black&White, age=4, isMolting=false)
Chicken(id=9, name=Kleiver, color=Brown, age=3, isMolting=true)
Chicken(id=10, name=Rolita, color=White, age=0, isMolting=true)
Hello Chickens from the Simulator
My name is --> David Cepeda

Menu
Select an option:
1. Enter more 5 chicken
2. Show a chicken
3. Save chickens to CSV
4. Exit
5
Chickens saved to CSV file.
Hello Chickens from the Simulator
```

```
@author David Cepeda, DCCO ESPE
import java.time.LocalDate;
import java.time.Period;

public class Chicken {
    private int id;
    private String name;
    private String color;
    private LocalDate birthDate;
    private boolean isMolting;

    @Override
    public String toString() {
        int age = calculateAge();
        return "Chicken(" + "id=" + id + ", name=" + name + ", color=" + color + ", age=" + age + ", isMolting=" + isMolting + ')';
    }

    public Chicken(int id, String name, String color, LocalDate birthDate, boolean isMolting) {
        this.id = id;
        this.name = name;
        this.color = color;
        this.birthDate = birthDate;
        this.isMolting = isMolting;
    }

    public String toCSV() {
        int age = calculateAge();
        return id + "," + name + "," + color + "," + birthDate + "," + age + "," + isMolting;
    }

    private int calculateAge() {
        LocalDate currentDate = LocalDate.now();
        return Period.between(startDateInclusive: birthDate, endDateExclusive: currentDate).getYears();
    }
}
```

```
private static void showChickens(Chicken[] chickens) {
    System.out.println(x: "Details of the chickens:");
    for (Chicken c : chickens) {
        if (c != null) {
            System.out.println(x: c.toString());
        }
    }
}

private static void saveToCSV(Chicken[] chickens) {
    try (PrintWriter writer = new PrintWriter(new FileWriter(fileName: "chickens.csv"))) {
        for (Chicken c : chickens) {
            if (c != null) {
                writer.println(x: c.toCSV());
            }
        }
        System.out.println(x: "Chickens saved to CSV file.");
    } catch (IOException e) {
        System.err.println("Error saving to CSV: " + e.getMessage());
    }
}
}
```