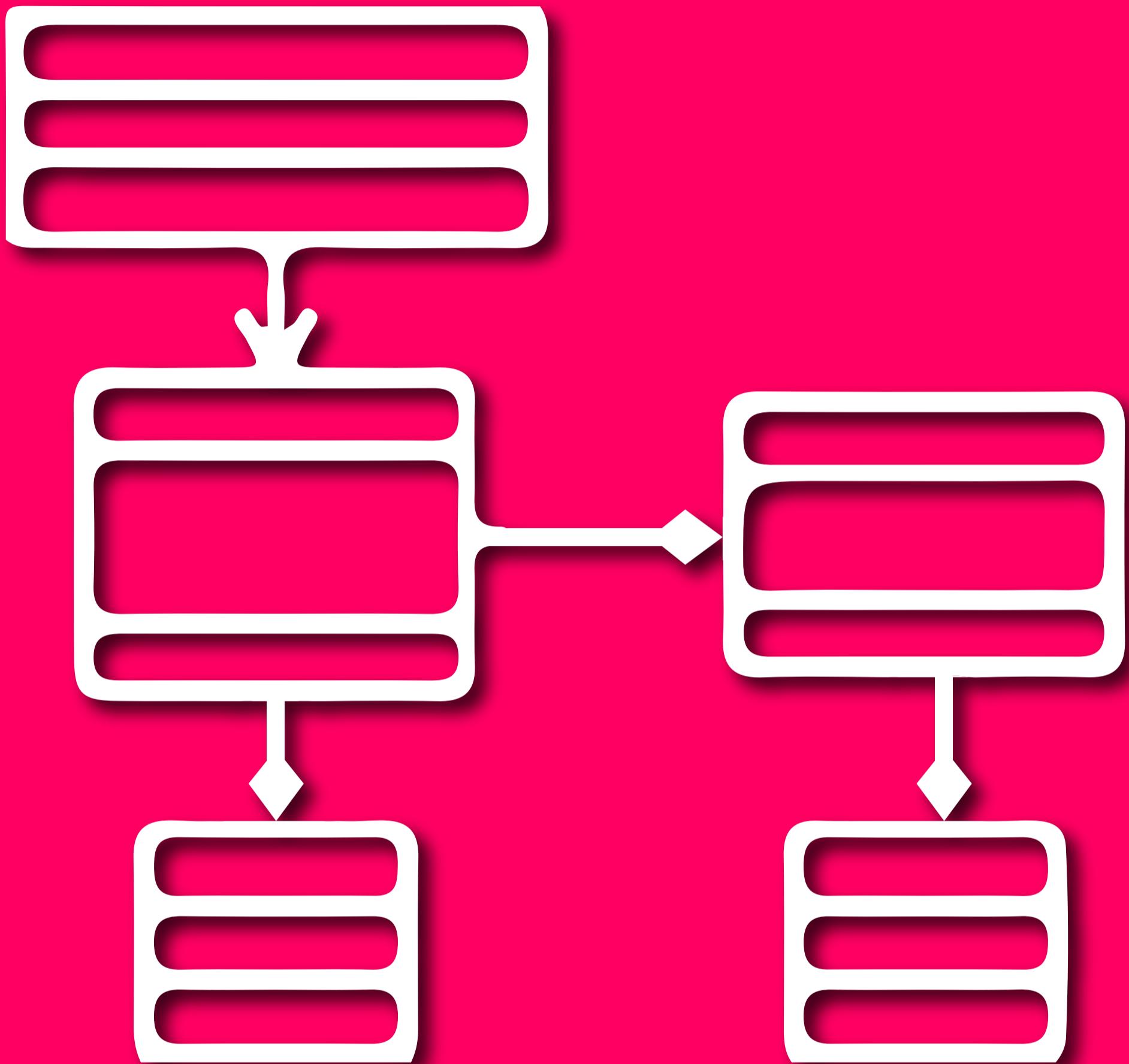




El futuro digital
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Relación entre clases

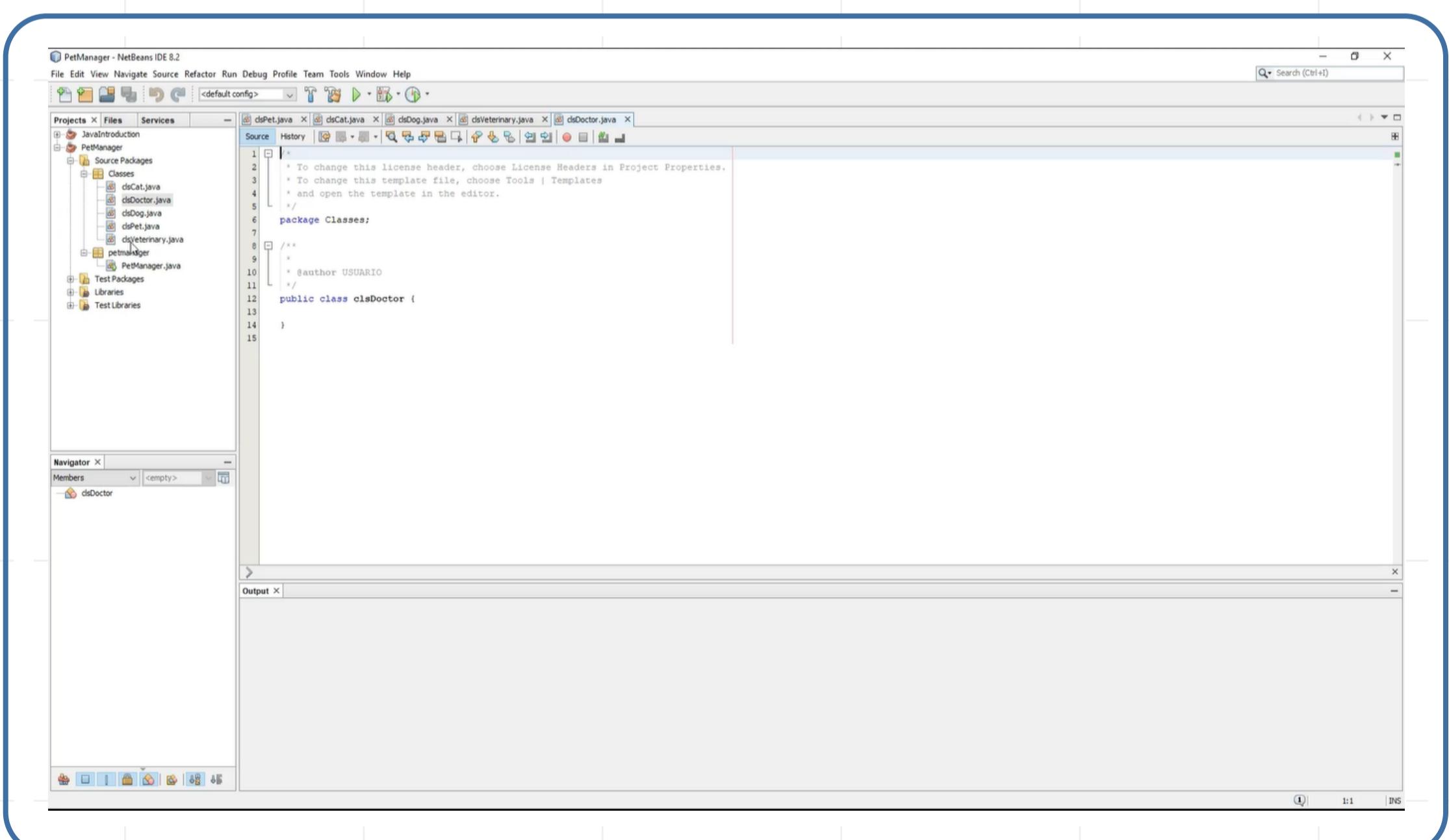
Parte 2

Hola:

Anteriormente diseñamos el diagrama de clases, el cual además de presentar los atributos y métodos de cada **clase**, define las relaciones que existen entre ellas.

Con esto claro es hora de realizar la codificación de dicho diagrama UML siguiendo los estándares del POO en el lenguaje Java.

Video de implementación del código asociado al diagrama de clases en UML.



The screenshot shows the NetBeans IDE interface with the following details:

- Title Bar:** PetManager - NetBeans IDE 8.2
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Toolbar:** Includes icons for file operations like New, Open, Save, Cut, Copy, Paste, Find, and others.
- Project Explorer:** Shows the project structure under "PetManager".
 - JavaIntroduction
 - PetManager
 - Source Packages:
 - Classes
 - dsCat.java
 - dsDoctor.java
 - dsDog.java
 - dsPet.java
 - dsVeterinary.java
 - petmanager
 - PetManager.java
 - Test Packages
 - Libraries
 - Test Libraries
- Code Editor:** The main window displays the Java code for `clsCat.java`. The code defines a class `clsCat` that extends `clsPet`. It includes a private attribute `breed` and a public method `SelfCleaning()` that prints a message to the console. It also includes a public method `getBreed()` with a Javadoc comment indicating it returns the breed.
- Navigator:** A panel titled "clsCat - Navigator" showing the members of the `clsCat` class.
 - Members: `<empty>`
 - dsCat :: dsPet
 - `SelfCleaning()`: void
 - `getBreed(): String`: String
 - `setBreed(String breed)`: void
 - `breed : String`: String
- Output:** An empty panel for displaying build or run logs.
- Bottom Bar:** Includes icons for file operations like New, Open, Save, Cut, Copy, Paste, Find, and others.

The screenshot shows the NetBeans IDE interface with the following details:

- Title Bar:** PetManager - NetBeans IDE 8.2
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Toolbar:** Standard NetBeans toolbar with icons for file operations.
- Projects Tab:** Shows the JavaIntroduction project expanded, revealing the PetManager package which contains Source Packages (dsCat.java, dsDoctor.java, dsDog.java, dsPet.java, dsVeterinary.java) and a petmanager folder containing PetManager.java. There are also Test Packages, Libraries, and Test Libraries.
- Source Editor:** The dsPet.java file is selected. The code defines a `clsPet` class with attributes: code, name, born_year, color, health_status, and a reference to a `clsVeterinary` object named `veterinary`. It includes a constructor that initializes these fields.
- Navigator:** The veterinary - Navigator window shows the members of the `clsPet` class, including methods like Eat(), Move(), Sound(), getBorn_year(), getCode(), getColor(), getHealth_status(), getName(), and setVeterinary(). It also lists fields: born_year, code, color, and health_status.
- Output:** The Output tool window is present at the bottom of the interface.

The screenshot shows the NetBeans IDE interface with the following details:

- Project Structure:** The left pane displays the project tree under "JavaIntroduction". The "PetManager" project contains several source files: dsPet.java, dsCat.java, dsDog.java, dsVeterinary.java, dsDoctor.java, and PetManager.java.
- Code Editor:** The central editor window shows the content of PetManager.java. The code compares the ages of two pets, Firulais and Minino, and prints their actions.

```
int agePet2 = current_year - cat1.getBorn_year();

if(agePet1 > agePet2){
    System.out.println("La mascota " + dog1.getName() + " es mayor que la mascota " + cat1.getName());
} else{
    if(agePet2 > agePet1){
        System.out.println("La mascota " + cat1.getName() + " es mayor que la mascota " + dog1.getName());
    } else{
        System.out.println("La mascota " + dog1.getName() + " tiene la misma edad que la mascota " + cat1.getName());
    }
}

dog1.Eat();

cat1.Eat();
cat1.Move();
cat1.Sound();

dog1.WalkAround();
cat1.SelfCleaning();
```
- Output Window:** The bottom right window titled "Output - PetManager (run)" shows the execution results:

```
La mascota Firulais tiene la misma edad que la mascota Minino
La mascota Firulais está comiendo.
La mascota Minino está comiendo.
La mascota Minino está moviéndose.
La mascota Minino está relaizando el sonido.
El perro Firulais está caminando.
El gato Minino se está limpiando.
BUILD SUCCESSFUL (total time: 0 seconds)
```

Una vez que hemos aprendido cómo diseñar un diagrama de clases con UML y cómo desarrollarlo en Java a través de Netbeans, los invitamos para que pongan en práctica este nuevo conocimiento resolviendo el reto de la semana.



**Mision
TIC2022**

The logo features the text "Mision TIC2022" in a bold, sans-serif font. The word "Mision" is positioned above "TIC2022". A thin, curved line starts from the top of the letter "i" in "Mision" and sweeps down to the bottom of the letter "c" in "TIC2022", ending with a small circular dot. The entire logo is set against a white circular background, which is itself centered within a larger, semi-transparent gray circle.



Universidad de Caldas