



El futuro digital
es de todos

MinTIC



Informe de gráficos en Java

Parte 1



Universidad de Caldas

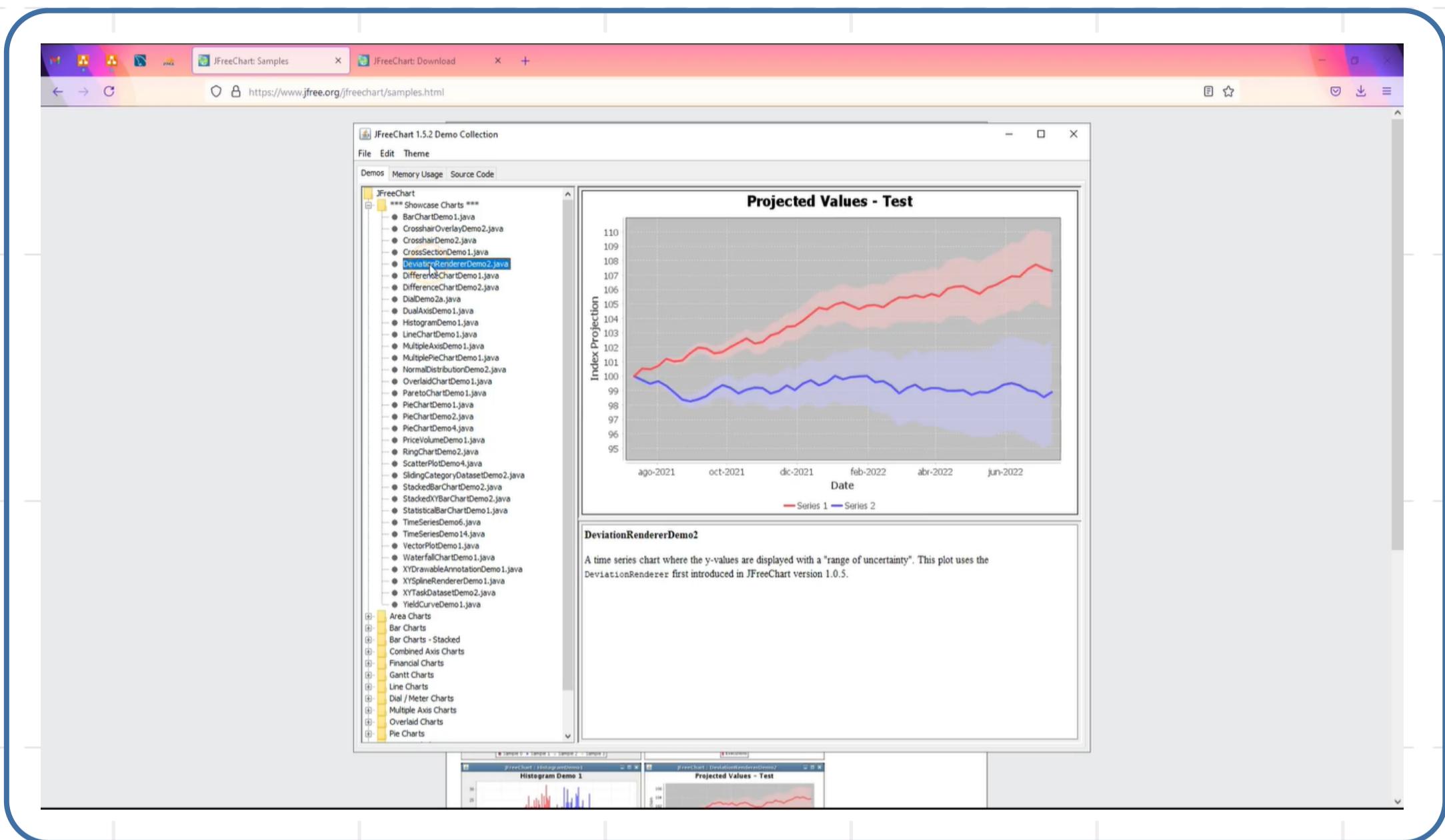
Hola:

En esta ocasión el enfoque estará dirigido hacia el desarrollo de funcionalidades relacionadas con la generación de gráficas y archivos de información con base a lo que se dispone en la base de datos. Y al igual como se ha evidenciado en la conexión a base de datos con JDBC y con JUNIT y Mockito en pruebas unitarias, se apoyará de librerías externas para mejorar el rendimiento de la aplicación y disminuir la curva de aprendizaje y el tiempo de desarrollo. Para las gráficas se utilizará JFreechart y para la creación de archivos se dispondrá de Excel, además, de la librería Apache POI. A continuación, se encuentra disponible la documentación y la manera de integrar JFreechart en el proyecto de mascotas que se ha desarrollado a lo largo del módulo con lo que se procurará llegar hasta la implementación de la consulta en la base de datos para obtener la información necesaria.

Video de documentación en el sitio web de Jfreechart e integración en el proyecto java.

The screenshot shows the JFree.org homepage. At the top, there's a navigation bar with links for HOME, JFREECHART, JFREESVG, FXGRAPHICS2D, JSFREECHART, and FORUM. Below the navigation is a banner with the text "Welcome To JFree.org!" and a brief description of the site's purpose. A sidebar on the left lists "Latest News" with several entries, each with a date, title, and a short description. The main content area features a "JFreeChart" section with a pie chart demo, a "JFreeSVG" section with a pie chart demo, and a "FXGraphics2D" section with a bar chart demo. There's also a "Links" section with links to Orson Charts 3D and Orson PDF, and a "Quote" section with a Hugh Laurie quote.

The screenshot shows the JFreeChart Samples page. The top navigation bar includes links for HOME, JFREECHART, SAMPLES, DOWNLOAD, API DOCS, DEVELOPER GUIDE, SUPPORT, and FAQ. The main content area displays a grid of nine windows, each showing a different type of chart generated by JFreeChart, such as Pie Charts, Line Charts, Scatter Plots, and Histograms. To the right of the charts, there is a note explaining that the samples are created using programs available for download in the JFreeChart Developer Guide.



The screenshot shows the SourceForge project page for JFreeChart. The top navigation bar includes links for 'Open Source Software', 'Business Software', 'Resources', and a search bar. A banner for 'PAVCO' and 'Wavin' is visible. The main content area shows the 'Files' tab selected, displaying a list of available files. The top row of the file list includes links for 'Download Latest Version' (jfreechart-1.0.19.zip, 0.1 MB) and 'Get Updates'. The file list shows three items: '1. JFreeChart' (modified 2014-07-31, 481 downloads/week), '2. Documentation' (modified 2014-07-31, 29 downloads/week), and '3. JCommon' (modified 2014-07-24, 60 downloads/week). A total of 570 downloads per week are shown. To the right, there is a sidebar for 'Recommended Projects' featuring Cewolf, iText, Krysalis JCharts, and React.

The screenshot shows a web browser window with two tabs open: "JFreeChart: Samples" and "JCommon". The current view is the "JCommon" tab, which displays the official JCommon project page. The page has a blue header with the "JFree" logo. Below the header, there's a "Welcome to JCommon!" section, a "Links" sidebar with links to Forum, Download, and Requirements, and a "Latest News" and "Documentation" sidebar.

Welcome to JCommon!

JCommon is a Java class library that is used by **JFreeChart**, **Pentaho Reporting** and a few other projects. The library contains miscellaneous classes that support:

- configuration and dependency management code
- a general logging framework
- text utilities
- user interface classes for displaying information about applications
- custom layout managers
- a date chooser panel
- serialization utilities

JCommon is licensed under the terms of the [GNU Lesser General Public Licence \(LGPL\)](#) version 2.1 or later.

Note that *JCommon* is being maintained but not actively developed and in the future will be dropped as a dependency for both *JFreeChart* and *Pentaho Reporting*.

Latest News

28 February 2014	JCommon 1.0.22 has been released!
24 October 2013	JCommon 1.0.21 has been released!
01 September 2013	JCommon 1.0.20 has been released!
30 August 2013	JCommon 1.0.19 has been released!
23 September 2012	JCommon 1.0.18 has been released!
18 October 2011	JCommon 1.0.17 has been released!

Documentation

API documentation can be generated using 'ant javadoc' (requires Ant to be installed) or viewed online.

Support

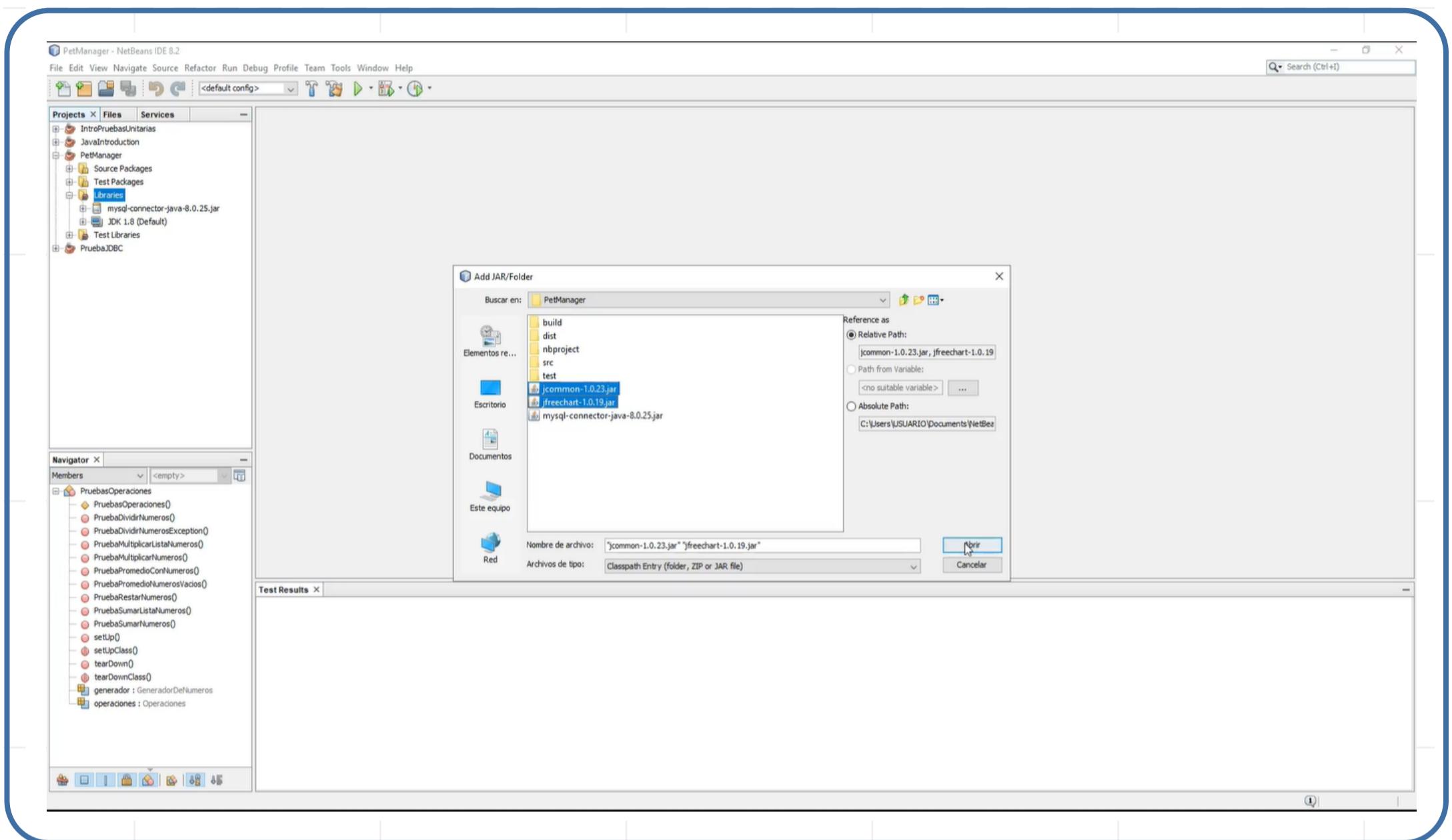
The [JCommon discussion forum](#) is the place to ask questions, request new features, report bugs and make any comments about the JCommon class library.

sourceforge.net/projects/freechart/files/3.JCommon/

The screenshot shows a file explorer window titled "PetManager" with the path "Este equipo > Documentos > NetBeansProjects > PetManager". The main area displays a list of files and folders:

Nombre	Fecha de modificación	Tipo	Tamaño
build	08/07/2021 16:05	Carpeta de archivos	
dist	06/07/2021 19:50	Carpeta de archivos	
nbproject	05/06/2021 20:54	Carpeta de archivos	
src	06/07/2021 17:16	Carpeta de archivos	
test	08/07/2021 16:06	Carpeta de archivos	
build.xml	05/06/2021 20:54	Documento XML	4 KB
jcommon-1.0.23.jar	15/07/2021 14:18	Executable Jar File	323 KB
jfreechart-1.0.19.jar	15/07/2021 14:18	Executable Jar File	1,534 KB
manifest.mf	05/06/2021 20:54	Archivo MF	1 KB
mysql-connector-java-8.0.25.jar	02/07/2021 21:35	Executable Jar File	2.372 KB

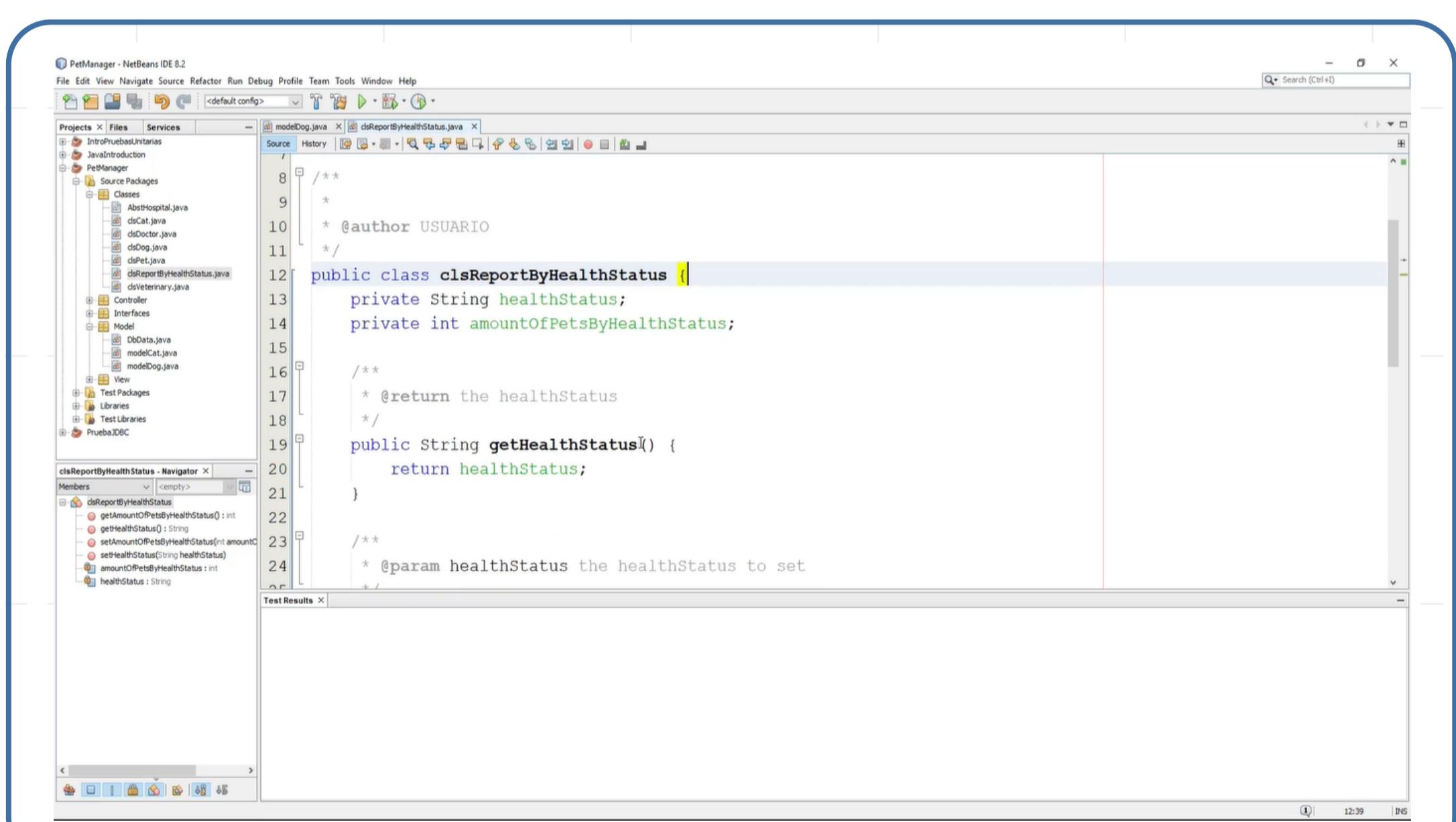
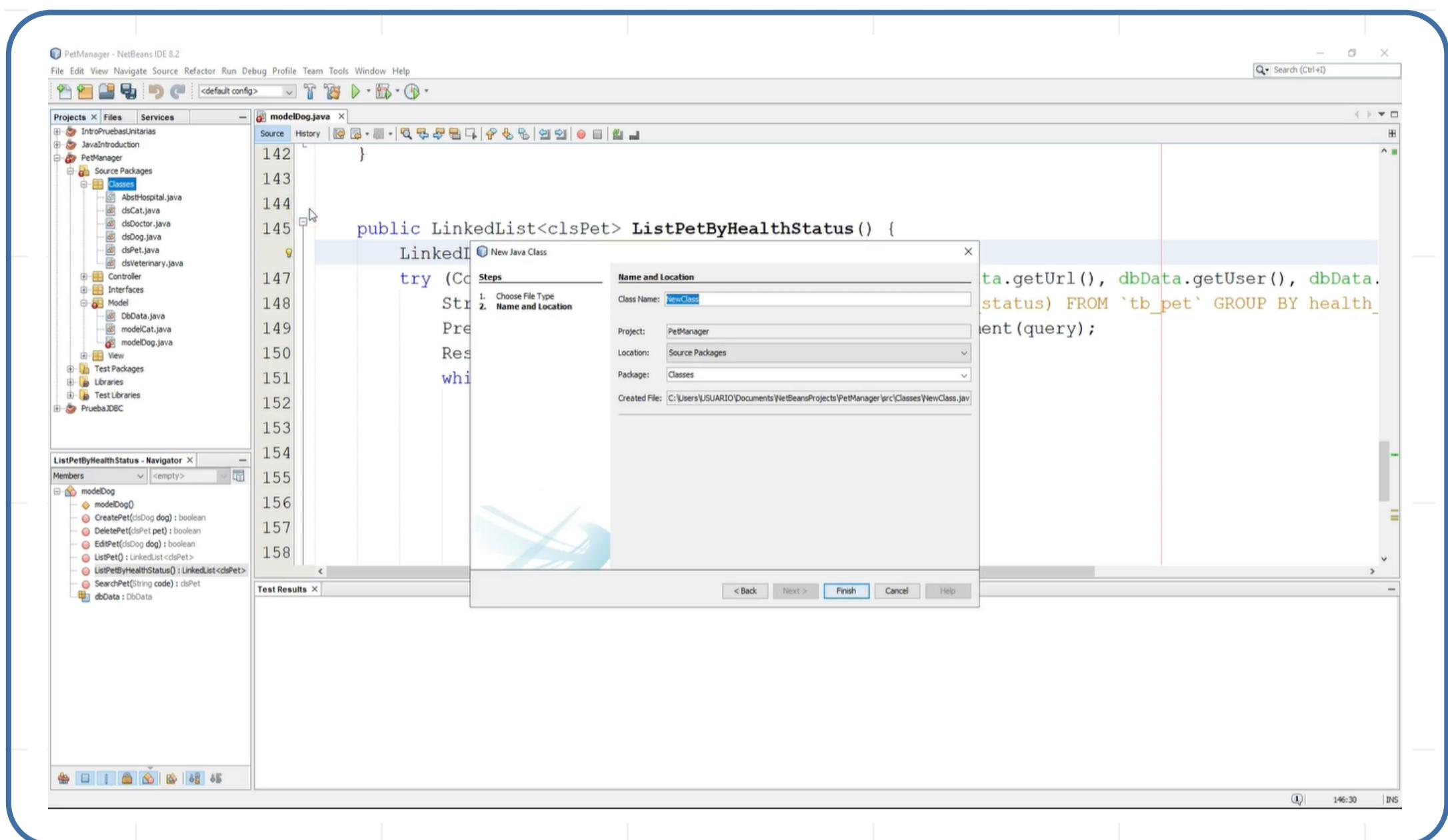
At the bottom left, it says "10 elementos 1 elemento seleccionado 1,49 MB".



The screenshot shows the phpMyAdmin interface with the following details:

- Left Sidebar:** Shows databases like 'administracionmascotasbd', 'information_schema', 'mascotasbd', 'mysql', 'notificacioneslucernabd', 'ofertalaboraldb', 'performance_schema', 'phpmyadmin', and 'test'. The 'tb_pet' table is selected.
- Top Bar:** Shows the URL 'localhost:81/phpmyadmin/index.php?route=/table/sql&db=administracionmascotasbd&table=tb_pet'.
- Toolbar:** Includes tabs for Examinar, Estructura, SQL, Buscar, Insertar, Exportar, Importar, Privilegios, and Operaciones.
- SQL Tab:** Contains a form to execute SQL queries against the 'tb_pet' table. The query entered is:

```
1 SELECT health_status, count(health_status)
2 FROM `tb_pet` I
3 GROUP BY health_status
```
- Results Pane:** Shows the schema for the 'tb_pet' table with columns: id, code, name, born_year, color, and health_status.



The screenshot shows the NetBeans IDE 8.2 interface with the following details:

- Project:** PetManager - NetBeans IDE 8.2
- File:** modelDog.java
- Code Snippet:**

```
144
145     public LinkedList<clsReportByHealthStatus> ListPetByHealthStatus() {
146         LinkedList<clsReportByHealthStatus> report = new LinkedList<>();
147         try (Connection conn = DriverManager.getConnection(dbData.getUrl(), dbData.getUser(), dbData.
148             String query = "SELECT health_status, count(health_status) FROM `tb_pet` GROUP BY health_
149             PreparedStatement statementPet = conn.prepareStatement(query);
150             ResultSet result = statementPet.executeQuery();
151             while (result.next()) {
152                 clsReportByHealthStatus record = new clsReportByHealthStatus();
153                 String healthStatusType = result.getString(1);
154                 int amount = result.getInt(2);
155                 record.setHealthStatus(healthStatusType);
156                 record.setAmountOfPetsByHealthStatus(amount);
157                 report.add(record);
158             }
159         } catch (Exception e) {
160             return report;
161         }
162     }
```

- Navigator:** Shows members of the modelDog class, including methods like CreatePet, DeletePet, EditPet, ListPet, ListPetByHealthStatus, SearchPet, and dbData.
- Test Results:** An empty window.
- Status Bar:** Shows the time as 157:19 and mode as INS.



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The logo features the text "Mision TIC2022" in a bold, sans-serif font. The word "Mision" is in blue, "TIC" is in red, and "2022" is in blue. A red curved line starts from the top of the letter "i" in "Mision" and ends at the bottom of the letter "c" in "TIC". The background of the logo is a white circle with a gray dotted pattern, set against a dark red circular border.

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