

ADVANCED JAVA

PROJECT

BY-

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Topic- Circular GUI Application

Project description-

The code creates a circular graphical user interface (GUI) application.

1. The code imports necessary packages for GUI components, image handling, and web browsing.
2. The `GrpActivity` class extends `JFrame` and implements the `ActionListener` interface.
3. The class defines several instance variables representing GUI components, such as buttons (`btn1`, `btn2`, `btn3`, `btn4`, `btn5`) and a text field (`searchField`).
4. The `GrpActivity` constructor sets up the main frame and its layout, and adds a component listener to handle window resizing and shape modifications.
5. The constructor initializes and configures the GUI components, including icons for buttons, tooltips, and event listeners.
6. The GUI layout consists of various panels (`topleftPanel`, `bottomLeftPanel`, `topRightPanel`, `bottomRightPanel`) organized using `JSplitPane` containers.
7. The panels are styled using colors and gradient paints to create visual effects.
8. Event listeners are implemented for each button to handle specific actions:
 - `btn1` changes the frame's transparency and text when clicked.
 - `btn2` closes the application.
 - `btn3` minimizes the application window.

- ``btn4`` opens a web browser and redirects to YouTube Music.
 - ``btn5`` performs a web search on YouTube based on the text entered in ``searchField``.
9. The application window is set to be undecorated, with a fixed size, centered on the screen, and visible.
10. The ``main`` method creates an instance of ``GrpActivity`` to launch the application.

Overall, this code creates a custom GUI application with buttons, a text field, and various visual effects. It allows users to control the transparency of the window, perform web searches on YouTube, and access YouTube Music through button clicks.

Instructions for compiling and running the code-

Step 1: Set up Java Development Kit (JDK)

Step 2: Save the code

- Copy the given code and save it in a file named "GrpActivity.java"

Step 3: Open command prompt

Step 4: Navigate to the code's directory

- Use the `cd` command to navigate to the directory where you saved the "GrpActivity.java" file.

Step 5: Compile the code

- In the terminal or command prompt, execute the following command to compile the Java code: **javac GrpActivity.java**

Step 6: Run the program

- After the compilation process completes without any errors, run the Java program using the following command: **java GrpActivity**

Video Link-

https://drive.google.com/file/d/1dqU12KB6ZbGCm2ICycR3XqqYT4UjIAlM/view?usp=share_link