**1. Introduction**

The **Compiler UI** is a JavaFX-based application that allows users to write, compile, and execute Java programs easily. This tutorial explains how to use the application effectively.

**2. System Requirements**

To run the Compiler UI successfully, ensure the following:

* ✅ Java JDK 24 or higher is installed.
* ✅ JavaFX SDK 24 is configured correctly.
* ✅ Internet connection (optional for loading external resources).

**3. Getting Started**

**🎯 Step 1: Launch the Application**

* Double-click the CompilerUI.bat file to open the application.
* Alternatively, run the CompilerUI.java file using:

bash

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javac CompilerUI.java

java CompilerUI

**🎯 Step 2: Understanding the Interface**

* **Code Area:** Write your Java code here.
* **Run Button:** Compiles and executes the code.
* **Clear Button:** Clears the code area and output.
* **Output Area:** Displays compilation messages and results.
* **PDF Tutorial Button:** Opens this tutorial for reference.

**4. How to Write and Run Code**

**📝 Writing Code**

* Write a simple Java program in the code editor.
* Example:

java

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public class Hello {

public static void main(String[] args) {

System.out.println("Hello, World!");

}

}

**▶️ Running Code**

* Click the **Run** button to compile and execute the code.
* Check the output area for results or error messages.

**5. Opening the PDF Tutorial**

* Click the **PDF Tutorial** button.
* The tutorial opens in a new window or external PDF viewer.

**6. Troubleshooting**

* ❗ **Java or JavaFX Not Found:** Ensure Java and JavaFX are correctly configured.
* ❗ **PDF Not Opening:** Check if the CompilerUITutorial.pdf file is in the same directory as CompilerUI.java.

**7. Additional Features**

* Syntax highlighting for better readability.
* Error handling with detailed error messages.
* PDF viewing using JavaFX WebView or system default viewer.

**8. Contact Information**

For any issues or queries, feel free to contact the development team.

✅ **End of Tutorial**