**Deployment Documentation**

This documentation serves as the installation manual for the Library Management System application. It outlines the steps needed to install and run the application on your system.

**1. Prerequisites**

**Install the fallowing software**

* **Java Development Kit (JDK)**: Ensure JDK 8 or later is installed. You can download it from the [Oracle website](https://www.oracle.com/java/technologies/javase-downloads.html) or use a package manager like apt-get (Linux) or brew (Mac).
* **Integrated Development Environment (IDE)**: It's recommended to use an IDE like IntelliJ IDEA, Eclipse, or Visual Studio Code for easier management and execution of the project.
* **Git**: Ensure Git is installed to clone the repository from GitHub.

**2. Installation Steps**

**Step 1: Clone the Repository**

1. Open a terminal or command prompt.
2. Navigate to the directory where you want to clone the project.
3. Run the following command to clone the repository:sh

git clone https://github.com/your-username/library-management-system.git

1. Change directory to the cloned repository:

cd library-management-system

**Step 2: Open the Project in Your IDE**

1. Open your preferred IDE (IntelliJ IDEA, Eclipse, etc.).
2. Select the option to open or import a project.
3. Navigate to the library-management-system directory and select it.
4. Follow the IDE prompts to import the project as a Java project.

**Step 3: Compile the Project**

1. Open the terminal or command prompt in your IDE or navigate to the src directory in the terminal.
2. Run the following command to compile the Java files:

javac \*.java

**Step 4: Run the Project**

1. Ensure you are in the src directory.
2. Run the Main class using the following command:

java Main

1. The application will start, and you can interact with it through the command-line interface.

**3. Additional Configuration**

* **Environment Variables**: Ensure that the JAVA\_HOME environment variable is set to the JDK installation directory.
* **IDE Configuration**: Configure the build path in your IDE to include the JDK libraries.

**4. Troubleshooting**

* **Compilation Issues**: Ensure all Java files are in the correct directory and the JDK is properly installed.
* **Runtime Errors**: Check the console for error messages and ensure all dependencies are correctly configured.
* **Git Issues**: Ensure Git is installed and properly configured on your system.