

Development Documentation for Library Management System

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1. JavaDoc Comments:

JavaDoc comments are used to document the classes, methods, and attributes in your project. They serve as a comprehensive source of information for developers who work with the code. Make sure to include JavaDoc comments for each class, method, and important attribute. Describe the purpose, usage, and any important details.

2. Source Code Directory Structure:

Organize your source code into directories for clarity. Here's a basic directory structure example:

- **src/** (Source code files)
- **com/**
- **yourcompany/**
- **library/**
- **Book.java**
- **Author.java**
- **Patron.java**
- **Library.java**
- **test/** (Test files, if any)
- **doc/** (Documentation, including JavaDoc)

You can adapt this structure as needed, especially if your project involves multiple packages or modules.

3. Build Process:

9. Compilation Instructions:

10. To compile the project, you can use the Java compiler (**javac**). Navigate to the root directory of your project (where the source files are) and execute:

11. bashCopy code

13. This command compiles all Java source files and places the compiled **.class** files in the **bin** directory.

14. Compiler Time Dependencies:

15. The only compiler time dependency is the Java Development Kit (JDK) that includes the Java compiler (**javac**). Ensure you have a JDK installed on your development machine.

4. Development Standards:

Establish development standards for your project, including naming conventions, coding style, and documentation guidelines. Consistency in coding standards makes the codebase more readable and maintainable.

5. Setting Up a Database for Development:

If your project requires a database, provide instructions for setting up a development database. Specify the database management system you are using, along with database creation and configuration details.

6. Accessing the Source Code Repository:

If you are using a version control system (e.g., Git), provide information on how to access the source code repository:

16. Git Repository:

17. If your project is hosted on a Git repository (e.g., GitHub), provide the URL to the repository. Developers can use Git to clone the repository and contribute to the project.

18. Example:

19. bashCopy code

clone <https://github.com/yourcompany/library-management.git>

21. Include information on how to contribute, create branches, and submit pull requests if your project is open-source and collaborative.

This development documentation guide serves as a reference for developers working on your project. It ensures that the project's code is well-documented, organized, and easy to build. You can expand on each section as needed to cover specific details of your project's development process.