

Here are some beginner-friendly project ideas that you can implement using Java desktop-based applications. These projects can be developed using either JavaFX or Swing, depending on your preference and familiarity with the toolkit.

1. Simple Calculator

- **Description:** Create a basic calculator that can perform arithmetic operations like addition, subtraction, multiplication, and division.
- **Features:**
 - Numeric keypad and display.
 - Buttons for basic arithmetic operations.
 - Clear and backspace functions.

2. To-Do List Application

- **Description:** Develop a simple to-do list application to help users manage their tasks.
- **Features:**
 - Add, edit, and delete tasks.
 - Mark tasks as complete.
 - Filter tasks by status (completed or pending).

3. Student Management System

- **Description:** Build an application to manage student records, including personal information and academic details.
- **Features:**
 - Add, edit, and delete student records.
 - Search for students by name or ID.
 - Display a list of all students.

4. Library Management System

- **Description:** Create a system to manage books in a library, including borrowing and returning books.
- **Features:**
 - Add, edit, and delete book records.
 - Track which books are borrowed and by whom.
 - Search for books by title, author, or ISBN.

5. Contact Management System

- **Description:** Develop an application to manage personal or professional contacts.
- **Features:**
 - Add, edit, and delete contact information.
 - Search contacts by name or other criteria.
 - Display a list of all contacts.

6. Expense Tracker

- **Description:** Build an application to help users track their expenses and manage their budget.
- **Features:**
 - Add, edit, and delete expense entries.
 - Categorize expenses (e.g., food, transportation, entertainment).
 - Generate summary reports for specific time periods.

7. Basic Text Editor

- **Description:** Create a simple text editor with basic functionalities like Notepad.
- **Features:**
 - Open and save text files.
 - Basic text editing features (cut, copy, paste, undo, redo).
 - Text formatting options (font size, style).

8. Weather Application

- **Description:** Develop an application that displays weather information for a given location.
- **Features:**
 - Input a location to get the current weather.
 - Display weather details like temperature, humidity, and conditions.
 - Integrate with a weather API to fetch real-time data.

9. Quiz Application

- **Description:** Build a simple quiz application with multiple-choice questions.
- **Features:**
 - Display questions with multiple-choice answers.
 - Track and display the user's score.
 - Provide feedback on correct and incorrect answers.

10. Hotel Booking System

- **Description:** Create an application to manage hotel room bookings.
- **Features:**
 - Add, edit, and delete room and booking information.
 - Check room availability and book rooms.
 - Manage customer details and bookings.