

# Project Synopsis

## 1. Title of the project:

Calendar program using JAVA

## 2. Objective of the project:

The objective of this project is to develop a robust and user-friendly calendar application in Java. This application aims to accurately display monthly calendars for any specified month and year, ensuring correct alignment of days and dates while accounting for leap years. By implementing a straightforward user interface, either console-based or graphical, the program will facilitate easy interaction and input handling for users. Additionally, the project seeks to produce modular, maintainable, and efficient code, with built-in error handling and validation to manage invalid inputs gracefully. The overarching goal is to create a reliable calendar tool that can be easily extended with advanced features such as event scheduling, reminders, and holidays, thereby enhancing its utility and functionality for users.

## 3. Project category:

The calendar application project falls under the category of "Software Development" with a specific focus on "Java Programming".

## 4. Language and software tool used:

**Front End :** Java Swing or JavaFX

**Back End :** Java

## 5. Modules:

- a. **User Input:** Manages and validates user input.
- b. **Date Calculation:** Handles date-related computations and leap year adjustments.
- c. **Display:** Formats and presents the calendar.

- d. **Error Handling:** Manages and reports errors.
- e. **User Interface (optional):** Provides a graphical interface using Java Swing or JavaFX.
- f. **Testing:** Ensures functionality and integration through tests.
- g. **Documentation:** Provides code comments and user guides.

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