

# SMART ALARM

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Project Work in Android Development

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Alice .....	<b>Fel! Bokmärket är inte definierat.</b>
Bob.....	<b>Fel! Bokmärket är inte definierat.</b>
Claire.....	<b>Fel! Bokmärket är inte definierat.</b>

## Introduction

This project aimed to create a smart alarm system that can help users remember their schedules and upcoming events. The system is highly adaptable, allowing users to manually set alarms or automatically schedule them based on their events. Additionally, the system can execute a sequence of user-defined actions such as playing a YouTube video or adjusting the volume.

The user interface of the smart alarm system is intuitive and straightforward, with clear labels for options and settings. It's also designed to be highly dependable, ensuring that users never miss an important event or schedule.

Overall, this smart alarm system is a reliable and customizable tool for users to manage their schedules and events. Its user-friendly design makes it easy for users to set alarms, add events, and organize their schedules. Furthermore, the ability to play music and gradually increase the volume provides users with a customizable and pleasant way to start their day. Figure 1 below shows the use case diagram of the app.

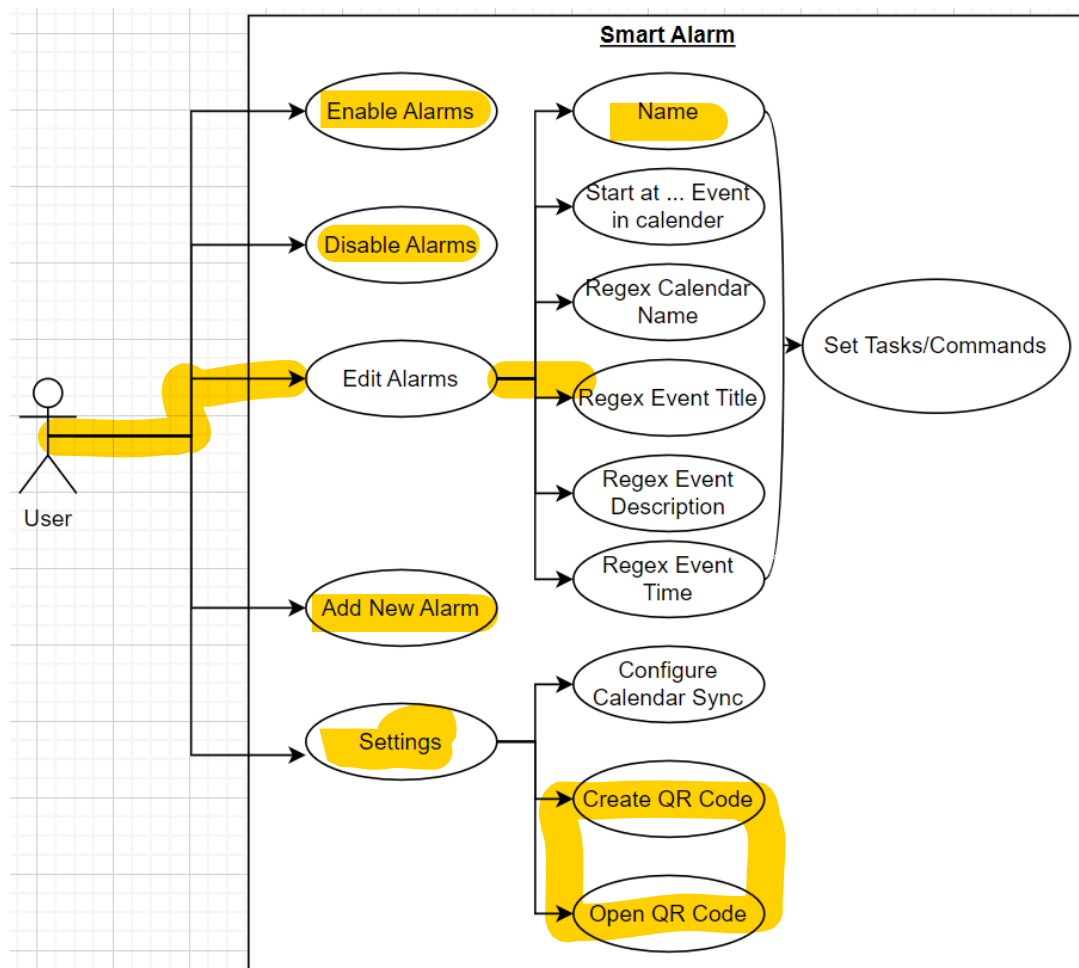


Figure 1: Use Case Diagram

## Overview

Smart Alarm is designed to help users stay organized on top of their busy schedules. The app utilizes several external components to make the system customizable and reliable, providing a user-friendly experience for our users.

As our primary programming language, we chose Kotlin, as it's the language we learned during the course and because it's particularly well-suited for Android development. Additionally, we utilized Android Studio, an integrated development environment (IDE) that provides a large set of tools for building Android applications.

To create a user-friendly and responsive user interface (UI), we chose to use Jetpack Compose, which is a modern toolkit that allows us to create user interfaces that are responsive and intuitive. With Jetpack Compose, users can easily interact with the system and make changes as needed.

To schedule alarms and reminders, we chose to use the Android Alarm Manager API. This API allows us to schedule events and broadcast receivers to handle alarms and events triggered by the Alarm Manager API. Additionally, we plan to use Google Calendar API to schedule alarms after a set event in the calendar, ensuring that users never miss an important event or schedule.

In summary, the smart alarm system uses Kotlin, Android Studio, Jetpack Compose, Android Alarm Manager API, and the Google Calendar API to create a customizable and reliable way for users to manage their schedules and events.

## Application

The app has been implemented in Kotlin using Android Studio.



## Extra Functionalities

### Worklog

Source code Git

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