

Gardener's Best Friend

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ABSTRACT

Gardener's Best Friend is a mobile app for people who want to maintain a journal tracking the well-being of their plants. Within this digital journal, gardeners can meticulously record plant-related information, including health status, watering schedules, and sunlight preferences. The primary goal of this app is to help users maintain their plants' schedule, strengthen their connection with their gardens, and enhance their gardening knowledge by capturing progress photos and documenting their plant journey in a personal journal. Gardener's Best Friend aims to enhance the interaction that gardeners have with their plants, providing users with tools to improve the overall wellness of their gardens.

The app offers further information about each of the user's plants, such as its known preferences regarding sunlight exposure retrieved from a comprehensive database. The database should give the user some insight into their plants' specific needs, ensuring that users can optimize their gardens' care routine. The digital journal even employs a notification system, reminding the user when they need to water their plants, based on the user provided watering schedule. In addition to these features, the app utilizes user location and weather conditions to determine if watering is necessary on a particular day. Overall, Gardener's Best Friend intends to cater to the average novice and expert gardeners alike, looking to keep records of their plants while offering guidance on how to take care of them.

Author Keywords

Authors' choice; of terms; separated; by semicolons; include commas, within terms only; this section is required.

1. INTRODUCTION

This application will have a few different features available to the user. It will include a diary function where the user can make entries pertaining to their plant health. It will take advantage of either local storage or a database to store plant data. It will also require access to the camera/gallery in order to either be able to take pictures of the user's plant or if user has an existing photo, to allow for pictures to be added to diary entries.

One of the features of the application that we are planning for is the possible inclusion of Google API. Using this service, the user would be able to take a picture of their plant, send it to Google API and get information back about their plant such as the scientific name. Another feature that we are discussing is either taking advantage of the built-in calendar or making an app internal calendar for reminders for making entries/watering. Another possible feature would require location services. Using that data, we would tie into a weather

forecasting application in order to get pertinent data for plant care.

2. TECHNOLOGY

Gardener's Best Friend is created in Android Studio using Kotlin. It uses an API developed by Perennial to access information from a plant database developed by the same company, which contains information such as how much sunlight a plant prefers or how much water a plant needs. We also use Canva to develop mockups and backgrounds for the app. Lastly, we use GitHub as version control for the project.

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