FLAURA

NATURE, CLOSER THAN EVER.
DISCOVER IT WITH FLAURA.

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Software System Requirement

1. Introduction

The Flaura mobile application is a computer vision and machine learning-based tool for accurately identifying flowers. The app is designed to help users expand their knowledge of flowers by comparing photos of flowers taken on their smartphones with a vast database of flowers using machine learning technology.

1.1 Purpose

The purpose of this SRS document is to outline the functional and non-functional requirements for the Flaura mobile application.

1.2 Scope

The Flaura mobile application will be available on both iOS and Android platforms. The app will allow users to take a photo of a flower and use machine learning technology to identify the flower. The app will also provide users with detailed information about the flower, including its common name, scientific name, and other relevant details.

2. Functional Requirements

2.1 User Interface

The purpose of this SRS document is to outline the functional and non-functional requirements for the Flaura mobile application.

2.2 Image Capture

The Flaura mobile application must allow users to take a photo of a flower using their smartphone camera. The app should have a camera feature that opens up when the user selects the "Take Photo" option. The app should also allow users to select an existing photo from their device's photo library.

2.3 Image Processing

The Flaura mobile application must use OpenCV computer vision technology to process the photo of the flower. The app should be able to identify the flower in the photo and compare it to a vast database of flowers to accurately identify the flower.

2.4 Machine Learning

The Flaura mobile application must use machine learning technology to improve the accuracy of the flower identification process. The app should continuously learn from user data to improve the accuracy of its identification process.

2.5 Flower Information

The Flaura mobile application must provide users with detailed information about the flower they have identified. The app should display the flower's common name, scientific name, family name, and any other relevant information about the flower.

2.6 User Profile

The Flaura mobile application should allow users to create a profile that stores their identification history. The app should also allow users to save their favorite flowers and create a personalized list of flowers they have identified.

3. Non-functional Requirements

3.1 Performance

The Flaura mobile application must be fast and responsive. The app should process the image and identify the flower within a few seconds.

3.2 Compatibility

The Flaura mobile application must be compatible with a range of smartphones and devices. The app should work seamlessly on both iOS and Android platforms.

3.3 Security

The Flaura mobile application must protect user data and ensure the privacy of users. The app should not store any personal information without the user's consent.

3.4 Reliability

The Flaura mobile application must be reliable and accurate. The app should provide users with accurate information about the flowers they have identified.

3.5 Usability

The Flaura mobile application must be easy to use and navigate. The app should have a user-friendly interface that is accessible to all users.

Conclusion

The Flaura mobile application is a valuable tool for nature lovers, gardeners, and botanists. The app provides users with accurate information about flowers and helps them expand their flower knowledge. The app utilizes OpenCV computer vision technology and machine learning to accurately identify flowers based on a photo. The app must have a user-friendly interface and provide accurate results to ensure its success.