

# Fruit Disease Detection Android App

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**Abstract:** *The development of the app involved several stages, including dataset collection, pre-processing, feature extraction, and disease classification. A comprehensive dataset comprising both healthy and diseased fruit images is curated and used for training the machine learning model. Pre-processing techniques are applied to enhance the captured fruit images, while feature extraction algorithms extract meaningful information to feed into the classification model. The trained model is then integrated into the Android app, allowing for real-time disease detection and diagnosis. The user interface of the app is designed to be intuitive and user-friendly, catering to farmers and agricultural professionals with varying levels of technical expertise. Users can simply capture an image of a fruit using their smartphone's camera and initiate the disease detection process. The app provides instantaneous feedback on the presence of diseases, along with detailed information regarding the specific disease type and severity.*

**Keywords:** Fruit disease detection, Android app, image processing, machine learning, and crop health monitoring

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