ABSTRACT
FORMAT CONVERSION MOBILE APP USING FFMPEG

This project presents a **mobile application** developed for the Android platform using Java and FFmpeg, aimed at converting multimedia files across various audio and video formats. The app brings powerful **file conversion** capabilities directly to smartphones, making it convenient for users to process media on the go without relying on desktop software or internet-based services. The **primary objective** of this application is to enable Android users to **convert media files** such as **MP4** to **MP3** or **MKV** to **AVI** directly on their devices, offer a simple and intuitive interface for selecting files, choosing output formats, and customizing conversion settings, and provide full offline functionality without requiring an internet connection. The app is built using Java as the programming language, with **FFmpeg** integrated through Android-compatible binaries or libraries like **MobileFFmpeg**, and the user interface developed using the Android SDK. The working of the app is straightforward: users can select a media file from device storage, choose the desired output format and settings such as resolution, bitrate, or codec, and initiate the conversion process by tapping a button. FFmpeg commands are executed internally, and the converted file can then be viewed or shared directly from the app. This Android-based file converter application effectively harnesses the power of FFmpeg in a mobile environment to deliver a **fast, flexible, and offline media conversion tool**. It is scalable for future enhancements such as trimming, merging, or cloud integration, and stands as a strong example of how complex media processing can be made accessible through a portable and user-friendly mobile interface

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