Google Summer of Code 2025 Proposal

Project Title

VLC iOS UI update - implementing Parental Control in VLC for iOS

Personal Information

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Synopsis

This proposal aims to update the User Interface and add new features to catch up with the Android version of VLC, enhancing and making the user experience safer and easier.

The main feature of this project will be adding to VLC iOS app the Parental Control feature already available on the VLC Android app. This will enable iOS users to restrict access to the app settings and to sensitive actions, such as deleting media files or modifying playlists, unless the user successfully authenticates via a PIN code or biometrics.

This is particularly useful in environments where children or unauthorized users might otherwise access media libraries unsupervised.

This feature will ensure that VLC for iOS offers the same level of protection and control alongside consistent design guidelines and accessibility currently available in VLC for Android.

As part of this effort, some components of the settings interface and media actions will also be reviewed and updated to align with modern iOS UI patterns. Implementing these improvements will strengthen the app's usability in shared environments and contribute to a safer, more polished experience for all users.

Benefits to the Community

- Ensures VLC remains accessible and safe for use by children or in shared devices.

- Adds feature parity between Android and iOS platforms.

- Encourages educational and home use of VLC as a safer media player.

- Makes VLC a more attractive choice for family settings, schools, or public iPads.

Current State and Limitations

The VLC for iOS app is a robust media player that shares many core features with its Android counterpart. However, parental control capabilities remain nonexistent on the iOS platform.

In contrast, the Android version of VLC offers a more complete Parental Control system, including:

- PIN Code Setup and Change

- Restricting access to app settings

- Safe Mode to prevent deletion or playlist modifications without authentication

This project addresses these gaps by bringing feature parity with the Android version, improving usability for families and educators, and enhancing user safety and control on shared devices.

Expected Outcomes and Deliverables

This project aims to deliver a comprehensive and integrated Parental Control system for VLC on iOS, aligned with the functionality already available on Android. The implementation will follow Apple's best practices for iOS security, design, and user interaction, while improving the current partial solution (Kids Mode).

The main expected outcomes are:

Phase 1

- Add "Parental Control" option in the Main Settings Section.

- Create the Parental Control Settings

- Add item to change PIN Code

- Add toggle for restrict settings access

- Add toggle for “Safe Mode” that disables file deletion and playlist editing unless authenticated.

Phase 2

- Integrate KeychainCoordinator and PasscodeLockController to handle all protected actions (delete, rename, share, modify playlists, restrict settings).

- Enable biometric Face ID using LocalAuthentication by setting allowBiometricAuthentication = true.

Phase 3

- Add tests to ensure all protected actions behave as expected under different access conditions.

- Write internal documentation.

- Review and improve any affected and necessary UI components.

About Me

I am a third-semester Software Engineering student with a big interest in iOS development and open source software. While my experience so far comes from coursework, exercises, and self-guided projects, I’ve built a solid foundation in Swift, UIKit, and iOS design patterns.

Contributing to an open source project has been a long-standing personal goal, and GSoC represents the ideal opportunity to apply what I've learned, collaborate with experienced developers, and grow through real-world experience.

I'm highly motivated to contribute meaningfully to VLC for iOS and excited to work on a feature that helps make the app safer and more user-friendly.

Commitment

I currently work on a part-time job, but I am fully committed to this project and can dedicate between 20 to 25 hours per week to work on GSoC. I will stay consistent throughout the duration of the program and keep regular communication with mentors to ensure steady progress.

In addition to this, I've decided to share my journey through bi-weekly blog posts on my portfolio. These blog posts will serve as a platform to reflect on my experiences, share my learnings, and connect with a wider audience.

By documenting my progress, I will contribute to the knowledge within the community and also reinforce my own learning and growth throughout the project.