

# Chat Away

**Software Design Template**

Version 1.0

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### Document Revision History

| Version | Date       | Author        | Comments   |
|---------|------------|---------------|--|
| 1.0     | 05/20/2024 | Tashyra Adams | Initial creation of the software design document |

Instructions: Fill in all bracketed information on page one (the cover page), in the Document Revision History table, in the footer, and below each header. Under each header, remove the bracketed prompt and write your own paragraph response covering the indicated information.

## Executive Summary

Chat Away, a social media company with a successful website, aims to expand its market reach by developing a mobile app available for both iPhone and Android smartphones. The primary objective is to increase their customer base and revenue. The project has been outsourced to stay within budget constraints.

## Requirements

The business requirements for Chat Away include the development of a mobile application that can be marketed in both the Apple App Store and Google Play Store. The technical requirements include ensuring the app is compatible with both iOS and Android operating systems, adheres to the respective app store guidelines, and integrates seamlessly with the existing website's backend.

## Design Constraints

1. **Cross-Platform Compatibility:** The app must be developed using a framework or technology that allows for deployment on both iOS and Android platforms without requiring separate codebases.
2. **Budget Constraints:** The development approach must be cost-effective, considering the limited budget, which influences the choice of development tools, frameworks, and potential third-party services.
3. **Integration with Existing Systems:** The app must integrate smoothly with the current website's backend infrastructure, necessitating compatibility with existing APIs and data handling processes.

## Rationale

1. **Cross-Platform Compatibility:** The requirement for the app to be available on both iPhone and Android platforms translates into the design constraint of using a cross-platform development framework, such as Flutter or React Native. This approach reduces development time and costs by allowing a single codebase to be used for both platforms, ensuring a consistent user experience and easier maintenance.
2. **Budget Constraints:** To address the budget constraints, the design and development process must be streamlined and efficient. This includes selecting cost-effective tools and avoiding unnecessary expenditure on third-party services. Utilizing open-source

frameworks and leveraging in-house expertise will help stay within the budget while meeting project requirements.

3. **Integration with Existing Systems:** The need for seamless integration with the existing website's backend infrastructure requires careful consideration of the current APIs and data structures. The design must ensure that the app can communicate effectively with the backend, handle data synchronization, and maintain data integrity. This constraint affects the choice of technologies and development practices to ensure compatibility and efficient data handling.