Chat Away

# Software Design

Version 1.0

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## Document Revision History

| Version | Date | Author | Comments |
| --- | --- | --- | --- |
| 1.0 | 07/04/23 | Francis Cottrell-Eshaghi | For-filling the desires of my capitalists lordship. |

## Executive Summary

The app Chat Away is a social media platform that allows users to create and join chat rooms based on their interests, hobbies, and preferences. Users can also send private messages, share media files, and follow other users. The app aims to provide a fun and engaging way for people to connect and communicate online.

The main business requirement of the client is to develop a mobile app that is compatible with both iOS and Android devices, and that can be easily downloaded from the app stores. The app should have the same features and functionality as the website, but with a user-friendly and responsive design that adapts to different screen sizes and orientations. The app should also have a secure and reliable back-end that can handle high traffic and data storage.

## Requirements

* The app should allow users to sign up and log in using their email address or social media accounts.
* The app should allow users to create a profile with basic information, such as name, age, gender, location, bio, and profile picture.
* The app should allow users to browse and join chat rooms based on categories, such as sports, music, movies, games, etc.
* The app should allow users to create their own chat rooms with custom settings, such as name, description, privacy, and invite-only options.
* The app should allow users to send and receive text messages, emojis, stickers, images, videos, audio files, and links in the chat rooms.
* The app should allow users to send and receive private messages with other users.
* The app should allow users to follow other users and see their activity on their feed.
* The app should allow users to like, comment, and share posts from other users or chat rooms.
* The app should allow users to edit their profile settings, such as changing their password, email address, notification preferences, etc.
* The app should have a simple and intuitive navigation system that allows users to switch between different screens and features easily.
* The app should have a consistent and appealing visual design that matches the brand identity of Chat Away.
* The app should have a fast and smooth performance that minimizes loading time and lagging issues.
* The app should have a secure and robust backend that can handle user authentication, data encryption, data storage, data synchronization, data backup, etc.
* The app should use cross-platform development tools and frameworks that can generate native code for both iOS and Android devices.
* The app should follow the guidelines and requirements of the app stores for iOS and Android devices.
* The app should be tested and debugged for any errors or bugs before launching.
* The app should be deployed and updated regularly with new features or improvements.

## Design Constraints

* The app should use native technologies and frameworks for iOS and Android development, such as Swift for iOS and Kotlin for Android.
* The app should use Firebase as the back-end service provider, as it offers various features such as authentication, cloud storage, real-time database, cloud functions, etc.
* The app should use Material Design for Android and Human Interface Guidelines for iOS as the design principles for creating a consistent and intuitive user interface.

## Rationale

* *Using native technologies and frameworks for iOS and Android development ensures that the app leverages the full potential of each platform and provides a high-quality user experience.*
* *Using Firebase as the back-end service provider simplifies the development process and reduces the cost and complexity of maintaining a custom back-end server.*
* *Using Material Design for Android and Human Interface Guidelines for iOS ensures that the app follows the best practices and standards for each platform and creates a familiar and engaging user interface.*