Chat Away

# **Software Design Template**

Version 1.0

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## Document Revision History

| Version | Date | Author | Comments |
| --- | --- | --- | --- |
| 1.0 | 01/14/2025 | Dhiraj Gurung | Outline of the client’s requirements and constraints. |

## Executive Summary

The client, Chat Away, is looking to create a mobile app that is available for both iPhone and Android smartphone users in an effort to market their product to a larger customer base and increase revenue. Chat Away also has a budget they must stay within.

## Requirements

1. Create a mobile app to help expand Chat Away’s presence.
2. Make the app available for both iPhone and Android smartphones.
3. Stay within the given budget.

## Design Constraints

1. **Creating a Mobile-Friendly App:** The mobile app needs to be tailored to a smaller device. This means that, unlike a desktop website, the UI will need to be created to accommodate smaller screens of varying sizes because different smartphones come in smaller sizes. Additionally, with the variance in phone sizes also comes different smartphone processors, some of which may not be powerful enough to run the app. The challenge for this requirement would be to create a mobile app that is powerful enough to have all the core functionalities of Chat Away run on a range of mobile devices but not so powerful that the majority of users can’t download the app.
2. **iPhone and Android Compatibility:** Since the app will be marketed towards both Android and iPhone users the app needs to be compatible with both the iOS and Android software. There are some features that one software may have that the other does not or both platforms could have the same feature but it works differently on Android than iOS. This means that there is an added challenge of using a development framework that will be able to support both platforms so that you can save money and time by not having to create two separate applications.
3. **Staying Within the Budget:** The budget is a big factor in the software development process and the budget may impact the quality of the given product. In order to stay within the budget there needs to be different decisions taken so that the work being done is sensible for the budget and still delivers a good quality product. If the budget is tight this might mean that there will be no extra features added to the product and instead, there will just be a heavy focus on the core functionality.

## Rationale

*<Explain your rationale for each design constraint you’ve identified and how it relates to the requirements provided to you by the client.>*

1. **Creating a Mobile-Friendly App:** This design constraint is the main requirement that the client has asked for which is creating an app. Chat Away is originally a website that can be viewed from different devices like a phone, desktop, or laptop. In creating a mobile application developers need to understand that creating an application for a phone is different from creating a website, so they will need to optimize the UI for both the smaller screen size and varying different smartphone processors.
2. **iPhone and Android Compatibility:** The next requirement was that the app needed to be available to both iPhone and Android users. This in and of itself is a constraint because now the app needs to be compatible with two different operating platforms, so different techniques and design decisions will need to be made than if the app was going to be made solely on Android or iOS. There now needs to be a decision made to develop the app in such a way that it is well suited for both platforms and not just optimized for one.
3. **Staying Within the Budget:** The next requirement is to stay within the budget, and it is also one of the most common constraints in software development. The client’s budget will be key in deciding how the money will be spent. The budget determines design decisions like whether or not the focus will be on creating only a functional product or also spending more money on extra features once the core product has been created.