

# Feasibility Study for CS 3300 Messaging App

## 1.Executive Summary

Instant, simple communication has become the status quo for consumers. Consumers use a host of different communication devices and demand a seamless transition between them. Our messaging app will allow users to easily switch between their computer, mobile phone, tablet, and smartwatch and not miss a single message. Whether you need to say “Hello” to a group or friends or send a System Requirements document to your manager, our messaging app will be able to meet your needs. While the marketplace is saturated with competitors for messaging applications, our client will have the advantage of operating on all major platforms. Our accessibility will be key to outperforming our competitors.

## 2.Description of Products and Services

The product being developed is a real-time mobile messaging app. Usage of these apps has increased dramatically over the last two years. In 2013, messaging apps became the fastest growing app category, according to an analysis by mobile analytics firm, Flurry. The anticipated, continued growth of this kind of app would support its development.

Our app will support android smartphone and tablet, smartwatch and a web client. Users can send each other messages or choose to create a group. Groups can be either made public or invite-only. Public rooms will be listed and any user can join in and chat. Messages can be read immediately and/or stored for later use. The service will also support images and PDF files to be uploaded and viewable in chat. Additionally, the service will integrate a bot feature. There will be four kinds and each will have a specific function. The bot's feature will be suggested by its name: EchoBot, CommandBot, BuildBot and TranslateBot. For example, the CommandBot will be able to recognize a “help” command and then list all possible commands.

## 3.Technology Considerations (YL)

Customers demand a simple, quick, and easy way to conduct online communication on-the-go. Accessibility and availability are the keys to meeting this demand. Newly emerging hardware make it necessary for the development of its compatible software. In other words, in order for this messaging system to reach the maximum accessibility, each device must have corresponding software that has up-to-date and similar functionalities. It is also extremely crucial that all interactions are conducted instantly and securely. Typical security vulnerabilities can be moderated by using existing application frameworks.

#### 4.Product/Service Marketplace

As more people are switching to smartphones, our means of communication is changing. Consumers are beginning to switch from standard text messaging to mobile messaging apps for their communication needs. Currently, WhatsApp is the industry leader with over 600 million users. Users of this app send thirty billion messages a day. By comparison, standard text messaging averages twenty billion a day.

In order to build a successful messaging app, it is important to observe the successes and failures of existing ones. All messaging apps provide one basic function, but the most popular provide something unique. WhatsApp users can send text, photos, video clips and audio clips through most smartphones, tablets and smartwatches. However, for a while, WhatsApp lacked a web client. This allowed messaging apps that did have one to grow. As of Feb 25, 2015, WhatsApp supports three web clients but is currently not available for iOS users.

Taking this into consideration, our app will have a different approach to groups and a unique bot feature. Currently, WhatsApp groups are invite-only and are not listed publicly. Our app will allow a user to create a group and then choose whether to list it publicly or keep it private. A public group can be searched for and accessed by anyone. Private groups will not be listed and require an invite from the admin.

#### 5.Marketing Strategy (YL)

As smartwatches start to emerge, a more convenient system will need to take place to accommodate the watches. Our messaging system offers that to gain customer interest. We will implement a customer e-mailing list in order to send promotions, advertisements, and other special offerings to customers who register. We will also maintain a customer database in order to determine its target customer groups and geographical regions. We will research marketing intelligence providers to determine the benefits and costs of purchasing customer information for bulk email campaigns as well.

#### 6.Schedule

The development of this service is expected to take less than four weeks. Below is a list milestones and the anticipated dates of completion. A more detailed schedule will be developed upon project approval.

May 28, 2015: Begin app design

June 2, 2015: Begin module development for supported devices  
June 9, 2015: Begin module testing  
June 15, 2015: Complete module development  
June 16, 2015: Begin module integration  
June 18, 2015: Complete module integration  
June 25, 2015: App demonstration

## 7. Findings and Recommendations

Based on both the effort required to complete the project and expected completion date, it is recommended that the messaging system begin implementation as soon as possible. The findings are as follows:

### Technology

- The app will utilize existing web and mobile frameworks to both minimize risk and ensure widespread availability
- The app requires little maintenance and cost once implemented

### Marketing

- The web and mobile platforms can reach a wide audience with little marketing
- Quick local growth is possible through connection with The Georgia Institute of Technology
- The market is capable of sustaining another well implemented messaging solution

### Organizational

- The required number of developers are already available
- Only a small investment in server space is required