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Tidle app
Software Design Report
Web Application

SENIOR DESIGN

VICTOR ALVARES
JIM SCHERED
VICTOR ALVARES
MATHEW TAMAY)



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Live Translation	Version 1.0
Software requirement specification	Date:10/25/2017

Revision History

Date	Version	Description	Authors
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Software Requirements Specification

1. Introduction

1.1 Purpose

This documentation provides a detailed description of the Tidle Multilingual Translating Chat App system and analyzes the different subsystems within this web application. As it is a Mobile application for first release, this document explains the features of the interface available to the users, how the users will interact with the application, and how the application will respond to these interactions. This document will also describe the reliability of its dependencies such as APIs and libraries published by third parties.

1.2 Scope

Tidle is a live translation chat app system which allows individuals to chat with relative across the globe in supported languages. Users, potential (sender and receiver), are given a profile view to the app based on their submitted credential, allowing them to view Chat room of their setting as well as the video chat and contact list menus. Upon initializing a chat room with another contact (either regular or video Chat), the Users can communicate with the other end user in one language which will be translate to another one in the other hand. The language choice will be up to both users and supported translation services available in the app release.

Moreover, Tidle gives certain responsibilities to users besides – the sender or the received. These responsibilities include such things as configuring chat setting, language choice, profile managing. Essential knowledge on the chat service utilization of the app

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1.3

Terms	Definition
User (Sender)	A User –need to register and has access to a control panel which handles customer. Registration required User to Provide uniquely identifiable credential that will be used for authentication Purposes. As A Sender User need to Have Contact or group that use the System and Have the option to choose who to chat initialize chat.
User (Receiver)	registrations and work status of its employees (hire/fire/promote).
Non-registered	A visiting user who can only browse/the app and cannot initial chat prior registration.
System (SY)	The system provides checkpoints for specific actions of the system's users
Login Panel	Allow User to provide preregistered credential and retrieve their information from firebase.
Users Control Panel	A control panel specific to user that allow them to update their profile, set up language choice, change their personal information.
Video Chat Panel	Required user to have a camera (both from and Back) to use the Service. Panel show current and history of video chat transcript. Include that button that allow User to speak, language is detected automatically then printed and send to Users. User have UI to Setup language choice in the Beginning. User to User Video Chat
Objective C	Programing language use for IOS App Development
Swift	Programing language use for IOS App Development With new feature than Objective C
Java	General Purpose Core Programing language for android App development. Support Object Orientation Cross Platform Compilation.

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WebRTC	<p>Free Open Source real time communication Framework that Work with Different API. enable rich, high-quality RTC applications to be developed for the browser, mobile platforms, and IoT devices, and allow them all to communicate via a common set of protocols.</p> <p>The WebRTC initiative is a project supported by Google, Mozilla and Opera, amongst others. This page is maintained by the Google Chrome team</p>
Firebase	Google mobile platform that help build App for Business Purpose.
Google speech Api	<p>Google Cloud Speech API enables developers to convert audio to text by applying powerful neural network models in an easy to use API. The API recognizes over 110 languages and variants, to support your global user base. You can transcribe the text of users dictating to an application's microphone, enable command-and-control through voice, or transcribe audio files, among many other use cases. Recognize audio uploaded in the request, and integrate with your audio storage on Google Cloud Storage, by using the same technology Google uses to power its own products. Support the most advanced deep learning neural network algorithms to your user's audio for speech recognition with unparalleled accuracy</p>
Google Map Api	Geo Location Service With more than one billion global monthly active users in over 200 countries, our data gives you accurate real-time information for mapping, navigation and places
Google Translation API.	The Cloud Translation API lets websites and programs integrate with the translation service programmatically. The Google Translation API is part of the larger Cloud Machine Learning API family